

CITY AND PORT OF CARDIFF



PUBLIC HEALTH DEPARTMENT ANNUAL REPORT 1970

Dr. D. J. W. ANDERSON, M.B., B.Ch., D.P.H.

Medical Officer of Health

Principal School Medical Officer

Port Medical Officer

CITY OF CARDIFF MUNICIPAL OFFICES
GREYFRIARS ROAD
CARDIFF

Telephone 31033



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COMMITTEES

(As at December, 1970)

HEALTH COMMITTEE

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"	MARTIN DAVIES, A.C.A.	"	J. F. PHILLIPS
"	WILLIAM DAVIES, M.R.S.H.	"	Dr. B. SANDFORD HILL
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		"	F. J. MCCARTHY

Co-opted Members

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Miss A. M. HARDING, O.B.E., B.SC.	Rev. D. T. EVANS
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Mr. B. A. BATEMAN	Rev. Canon W. CAHILL
Mrs. B. SMITH (Teachers Representative)	

PUBLICATIONS AND PAPERS

"Evaluation of Hypnotherapy in the Treatment of Psychosomatic Conditions Among College Students" by Dr. G. F. Newbold – paper read at the 5th International Congress for Hypnosis and Psychosomatic Medicine, held at the University of Mainz, West Germany, May 1970.

PREFACE

Ladies and Gentlemen,

I have pleasure in presenting the first Annual Report of the Medical Officer of Health to be prepared since I took office on 1st September, 1970.

Two thirds of the year under review were supervised by my predecessor, Dr. W. Powell Phillips, who retired on 31st August. Dr. Phillips was appointed as Medical Officer of Health in 1954 but had been in the department since 1930. The forty years of his life spent with the Authority were marked by a number of milestones in the development of the health services in Britain. He was a colourful character in a colourful era and his staff colleagues wish him a long and happy retirement.

Upon my promotion from Deputy to Chief Officer I became sixth in the line of Medical Officers to the Authority. All my predecessors were distinguished men of high reputation and learning and I am very conscious of the responsibilities to which I have become heir. These responsibilities are particularly great at the present time as we wait clarification of the various changes which are to take place in 1974 with the reorganisation of Local Government and the National Health Service.

1971 will see the formation of the city's Social Services Department, in line with the legislation following the Seebohm Report, and the transfer to that Department of a number of functions presently carried out by the Health Department. In particular the Home Help and Mental Health services will be affected and my personal view that this change is not in the best public interest is shared by many of my professional medical colleagues. The Junior Training Centre at Ty Gwyn is also to leave the Health Department to fall under the supervision of the Director of Education and this, too, is a source of some concern to me. I would hasten to add that I do not wish to imply any criticism of either the Director of Social Services or the Director of Education or their ability to manage the responsibilities which have been transferred to them. I merely contend that mental health, in particular, should properly come under the purview of the health services. The medical involvement in these services must inevitably continue and every effort will have to be made in the years to come to develop inter-departmental communication and co-operation.

At the same time much thought will have to be given in the next three years to the way the new National Health Service is to develop to ensure that patient care remains the keynote and is constantly safeguarded. During the period leading up to 1974 existing services must not be allowed to suffer through apathy in the face of impending change. Indeed full cognizance will have to be taken of the need to develop services in the light of the general trend away from hospital and towards community care.

In this latter context, as the community services become more sophisticated and prepared to accept their ever more demanding role, District Nursing services will need expansion; attachment schemes of local authority health visiting and nursing staff to general practice must develop, and more health centres must be established. The proliferation of day hospitals and the establishment of the University of Wales Hospital at the Heath will make heavy demands on the ambulance services which must be recognised and met.

Only in the field of midwifery is the trend away from hospital care reversed and as more and more mothers are confined in hospital so the cost effectiveness of the domiciliary service comes increasingly into question. The attraction of an integrated midwifery service based on the hospitals is a compelling one which must be assiduously worked for, to come into being as soon as possible. Of course the policy of early discharge of mothers and their babies after delivery imposes considerable post partum nursing strains on the domiciliary staff and this is a problem which has to be recognised in establishing an integrated service.

Intensive plans for the clearance of unfit housing and the great attention which is now being paid to noise and pollution in general highlight the problems which the Department faces on the environmental front.

It is against this background of change and development that I take office. It is a source of great pride to me that I should be given the opportunity of serving, to the best of my ability, the city of my birth. I am much heartened in the knowledge that Dr. Phillips' legacy to me is a loyal and efficient staff who can be trusted to carry out their responsibilities effectively.

I turn now to the year under review and would like to highlight some of the points which are expanded in more detail on the pages which follow.

I draw attention first to the staffing difficulties experienced within the Department. This has been particularly disquieting amongst the Public Health Inspectorate, the Dental Service and the Speech Therapists. The shortage of speech therapists causes greatest concern for this is a chronic situation which has resulted in inadequate cover being provided for the city's children for many years. Recruitment might be improved if, in the fulfilment of time, a School of Speech Therapy is eventually established in the city.

The steady decline in the birthrate as shown in Table II, page 2, from the peak in 1963 may reflect the effective development of the city's family planning services and, more recently, the gaining momentum of abortions procured under that sad and ill-conceived Act. The city's birthrate remains below the national average but, of course, still substantially exceeds the death rate, thus contributing in its small and insignificant way to the World population explosion. This, we are told, will result in more people being alive at one time on this planet by the year 1980 than have died throughout the whole of the recorded history of mankind. The prospect of Earth being more over-crowded than the combined immortal population of Heaven and Hell is frightening indeed. It is pleasing to note that there were over 5,000 attendances at Family Planning clinics during 1970 and that a further 1,307 domiciliary visits were made. Vasectomy was performed on 411 men at the Family Planning Association clinic but it is disturbing that almost twice this number were on the waiting list for the operation by the end of the year. This simple procedure is rapidly gaining in popularity amongst couples who have finally determined the size of their families. It is cheap and 100% effective and must surely be increasingly seen as a most acceptable form of family limitation. One would hope to see the National Health Service providing for the operation to be made available on much more liberally determined grounds than the present strictly medical criteria.

One cannot fail to remain distressed at the illegitimate birth rate of 11 per 100 live births – a rate which has more than doubled in a decade. The implications of this high figure on the need for family planning advice, health education, social worker support, etc., demands very serious consideration. We do not know how many more illegitimate pregnancies were terminated in their early months.

The illegitimate birth rate is some indication of the level of promiscuity in our society. So, too, are the notifications of venereal disease. Although, as Dr. Hughes has pointed out in his section of infectious diseases, there has been a slight decline in the reported incidence of syphilis and gonorrhoea in 1970, this is minimal when compared with the generally steep upward trend in recent years. It is worrying, also, to note that 80 persons aged 18 and under were treated for gonorrhoea in 1970 compared with only 32 in 1969.

On the subject of infectious disease the interesting, though unfortunately not very rewarding, survey into notified cases of infective hepatitis deserves mention. The epidemiology of this disease merits much closer investigation. No doubt many sub-clinical infections are passing unrecorded by general practitioners and were finer diagnostic techniques to be deployed in investigating vague gastro-intestinal upsets and unexplained pyrexias the origins of many of the sporadic isolated cases which occur might be determined.

No Medical Officer of Health should fail to take the opportunity in the light of present knowledge to draw attention to the epidemic of carcinoma of the lung and bronchus and its irrefutable link with cigarette smoking. One hundred and fifty Cardiffians died from this cause in 1970. This compares with 26 deaths from road accidents. What a pity it is that parents, teachers and indeed all of us involved in bringing up children cannot put over the anti-smoking message with the same enthusiasm and effectiveness as we do with kerb drill. Surely only the bigoted can still refuse to accept the incriminating evidence which has been amassed against the cigarette. What is needed now is not so much health

education advising the public of the facts – these are beginning to fall into the category of “what every schoolboy knows” – but an effective campaign to stamp out the smoking habit. Severe restrictions should be imposed in public places and on public transport. Selective taxation should be introduced militating against the cigarette and in favour of the relatively less harmful pipe and cigar. Those in authority; doctors, parents, teachers – even aldermen and councillors! – should set an example at all times to the younger generation in particular.

Health education of the public is becoming recognised as an important road to better living on a very broad front. Anti-smoking talks, sex education, anti-drug abuse propaganda, the dangers of obesity, etc., etc. These are all topics worthy of promotion. So too, I believe, is education in the field of dental decay to show the markedly favourable relationship between the incidence of this condition and areas in which the fluoride content of drinking water is naturally, or has been adjusted to, one part per million. In spite of the decisions of the City Council against the introduction of such an adjustment to the Cardiff water supplies I remain firmly convinced of the benefits of this measure and am totally dedicated to the support of its eventual adoption.

An important development during 1970 was the formation under my Chairmanship, with the support of Dr. F. M. Richards as Secretary, of the Cardiff Drug Liaison Committee bringing together professional representatives from many disciplines including the police, educationists, social services, medical and pharmaceutical personnel. Together we meet regularly to discuss and exchange information on the latest aspects of the drug scene. This frightening new dimension of youth expression concerns us all and a mention of the activities of this committee in this preface is merely to emphasise that the problem is not being ignored by those in the city who would hope to be able to exert some professional influence.

A most interesting project which reached fruition during 1970 was the opening on September 1st of the Llanedeyrn teaching Health Centre. The first of its kind in the country, it provides the Welsh National School of Medicine with an opportunity, unrivalled by any other medical school, for teaching general practice to medical students. This is a most important development since in the past this aspect of medical education has been sadly lacking.

Still on the subject of the student population, I am particularly interested in Dr. Newbold's report on his work at Cardiff's Colleges of Further Education. Few other authorities have developed a scheme to this extent. In 1962, as one of your assistant medical officers, I was responsible for this service in its very early days and I am impressed with the way it has prospered under Dr. Newbold's guidance.

If Dr. Newbold's work in caring for those preparing for their careers is to be commended so too are Dr. Hughes' efforts for those who have retired at the end of their working lives. Behind the concern which he expresses in clinical terms at the inadequacy of facilities generally for the care of the aged is a remarkable untold human story of dedicated care and attention given to the city's old and frail inhabitants. The senior health visitors responsible for geriatric services and Dr. Hughes himself have spared no efforts to alleviate suffering. Often their work is hampered by the most appalling social and living conditions which are a disgrace in a civilised society.

But it is dangerous to single out the work of any individuals for it may give false impressions in other directions. I have given only examples of a determination shown by all members of the staff to provide as good a service to the community as is possible within available resources. I hope this is fully evident from the paragraphs of the Report which I now place before you.

D. J. ANDERSON

City of Cardiff Department of Public Health,
Municipal Offices,
Greyfriars Road,
Cardiff CF1 3LA.
February, 1972

PUBLIC HEALTH DEPARTMENT STAFF (as at 31st December, 1970)

MEDICAL OFFICER OF HEALTH (CITY AND PORT) AND PRINCIPAL SCHOOL MEDICAL OFFICER

D. J. W. ANDERSON, M.B., B.CH., D.P.H.

DEPUTY MEDICAL OFFICER OF HEALTH AND DEPUTY PRINCIPAL SCHOOL MEDICAL OFFICER

J. N. P. HUGHES, M.B., B.CH., D.P.H.

SENIOR MEDICAL OFFICERS

F. MARIE RICHARDS, B.SC., M.B., B.CH, D.OBS.R.C.O.G., D.C.H., D.P.H.

MEDICAL OFFICER (With Special Responsibilities)

GILLIAN BRYANT, M.B., B.CH.(WALES), D.C.H., D.OBS.R.C.O.G.
(Joint appointment with Welsh National School of Medicine)

MEDICAL OFFICERS AND SCHOOL MEDICAL OFFICERS (Whole-time)

ENID CURRAN, M.B., B.CH., D.C.H.	SYLVIE M. HARRISON, B.SC., M.B., B.CH., D.OBS.R.C.O.G., D.P.H.
BRENDA M. MEAD, M.B., B.CH., D.C.H., D.P.H.	G. F. NEWBOLD, M.R.C.S., L.R.C.P., M.B., B.S., D.R.C.O.G., M.M.S.A., D.C.H.
MARY COTTER, M.B., B.CH., D.OBS.R.C.O.G.	MARY P. E. JENKINS, B.SC., M.B., B.CH.
ALICE J. M. STANBURY, M.B., B.S., D.R.C.O.G.	

Fifteen Part-time Medical Officers

CONSULTANT MEDICAL STAFF

PETER A. GRAHAM, F.R.C.S., Ophthalmic Surgeon
PAUL V. MILLS, F.R.C.S., Ophthalmic Surgeon
HECTOR A. THOMAS, F.R.C.S., Aural Surgeon
Professor O. P. GRAY, Professor of Child Health
J. LOWTHER, M.B., B.CH., D.P.M., Psychiatrist, Education Department
GAYNOR LACEY, M.B., B.S., D.P.M., Psychiatrist, Child Guidance Clinic
M. S. N. PATHY, M.R.C.P., M.R.C.S., Geriatrician
H. M. FOREMAN, M.B.E., M.B., F.R.C.P., Chest Physician

DENTAL OFFICERS

Principal School Dental Officer – H. V. NEWCOMBE, L.D.S., R.C.S.

J. W. LEWIS, L.D.S., Senior Dental Officer	Mrs. A. STREIBERGS, D.D.D. (Latvia)
W. SMILLIE, L.D.S.	Miss N. LEAVER, L.D.S., R.C.S.
R. J. DAVIES, B.D.S.	Mrs. P. L. COOPER, B.D.S.
J. E. TURNER, L.D.S., R.C.S.	J. G. JAMES, B.D.S.
Six Part-time Dental Officers	One Senior Dental Clerk
	Ten and a half Dental Clerks

NURSING AND MIDWIFERY

Superintendent Nursing Officer and Non-Medical Supervisor of Midwives

Miss M. M. MCCARTHY, S.R.N., M.T.D., H.V. CERT., Q.N.

Superintendent Health Visitor—Miss H. M. THOMAS, S.R.N., H.V.CERT.

Thirteen Centre Superintendents	Five Student Health Visitors
Four Senior Health Visitors	Thirteen and a half Clinic Nurses
Forty-five and a half Health Visitors	Eight and a half Nursing Auxiliaries
	One School Nurse

Superintendent of Midwifery Service—Mrs. P. E. MOORE, S.R.N., S.C.M.

One Assistant Superintendent	Twenty District Midwives
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Superintendent of District Nursing Service—Miss L. M. JOHN, S.R.N., S.C.M., H.V.CERT., Q.N.

One Assistant Superintendent	Eight Senior District Nurses
One Administrative Nurse	Two Senior Night District Nurses
Three Student District Nurses	Forty-four District Nurses

SANITARY ADMINISTRATION

Chief Public Health Inspector (Urban)—W. BATE, M.B.E., M.A., D.P.A., F.R.S.H., M.A.P.H.I.

Deputy Chief Public Health Inspector—D. LLOYD-JONES, M.A.P.H.I.

Three Divisional Public Health Inspectors

One Senior Public Health Inspector (Housing)

Twelve District Public Health Inspectors

One Rehousing Assistant

Four Senior Specialist Public Health Inspectors

Five Specialist Public Health Inspectors

Nine Pupil Public Health Inspectors

One Rodent Control Officer

Seven Technical Assistants

Chief Port Health Inspector—T. G. NEWBY, Master Mariner, M.A.P.H.I.,
One Technical Assistant

VETERINARY AND MEAT INSPECTION

Veterinary Officer and Chief Meat Inspector

E. B. DAVIES, B.V.SC., M.R.C.V.S.

One Senior Meat Inspector

Four Authorised Meat Inspectors

CITY ANALYST'S LABORATORY

City Analyst—A. R. PHILLIPS, B.SC., F.R.I.C., M.CHEM.A.

Deputy City Analyst—R. H. MCKINLAY, F.R.I.C.

One Senior Analyst, two Analysts, three Assistant Analysts, two Laboratory Technicians, one Shorthand Typist

ADMINISTRATION, ETC.

Principal Administrative Assistant—P. H. WILLIAMS, J.P., F.C.I.S.

Deputy Principal Administrative Assistant—J. S. GENTLE

Senior Administrative Assistants

General Health Services—K. J. BOWDERY, D.M.A.

School Health Service—A. K. JENKINS

Finance and Stores—W. T. PATTERSON

Administrative and Clerical Assistants —	General, Finance	23
	Sanitary Administration	8
	School Health Service	} 40
	Vaccination and Immunisation	
	Mental Health	2
	Home Help	3

Senior Mental Welfare Officer—L. CLUTTERBUCK, S.R.N., R.M.N., R.M.P.A., M.I.S.W.
Eight Mental Welfare Officers

Ambulance Officer—H. D. EDWARDS

One Joint Ambulance Liaison Officer Deputy Ambulance Officer

Six Ambulance Supervisors

Home Help Organiser—Miss G. MIDGLEY

Deputy Home Help Organiser

Four Assistant Home Help Organisers

Occupation and Training Centres

Pengam Industrial Training Centre

One Manager; One Instructor – Male; One Instructor – Female

Pengam Occupation Centre

One Senior Supervisor; Four Supervisors; Two Assistant Supervisors

Ty Gwyn Training Centre

One Principal Supervisor

Six Supervisors

Five Assistant Supervisors

One Trainee Supervisor

One Supervisor and Deputy Principal Supervisor

One Domestic Work/Housecraft Supervisor

Seven Nursery Assistants

Medical Auxiliaries

Senior Speech Therapist—Miss B. MORRIS, L.C.S.T.

and One and a half Speech Therapists

Senior Physiotherapist—Mrs. I. M. CASHMAN, M.C.S.P.
and four Physiotherapists (sessional)

GENERAL HEALTH SERVICE

I—SUMMARY OF GENERAL AND VITAL STATISTICS

Area (acres):

Including inland water and foreshore	..	..	..	..	..	22,736
Including inland water (excluding foreshore)	..	..	..	..	..	19,941
Excluding inland water and foreshore	..	..	..	..	..	19,366

Population:

Census 1961	..	..	..	..	..	..	..	..	256,270
Registrar-General's estimate, mid-1970	..	..	..	..	..	..	..	..	284,010
Number of persons per acre	..	..	..	..	..	..	..	..	14.67
Estimated number of inhabited houses	..	..	..	..	..	..	..	..	87,837
Estimated number of inhabited houses per acre	..	..	..	..	..	..	..	..	4.54
Estimated average number of persons per occupied house	..	..	..	..	..	..	..	..	3.23
Rateable value, 1.4.70	..	..	..	..	..	..	..	..	£14,008,893
Estimated product of a penny rate 1970-71	..	..	..	..	..	..	..	..	£55,000
Live Births	..	Male 2,188	Female 2,105	4,293	Birth Rate per 1,000	{ Crude	..	..	15.1
						{ Adjusted by A.C.F.	..	..	14.9
					Ratio of Local Adjusted Birth Rate to National Rate	..	..	..	0.93
Illegitimate Live Births	..	..	..	462	% of Total Live Births	..	..	..	11
Stillbirths	..	..	..	60	Rate per 1,000 Total Births	..	..	..	13.8
Deaths	..	Male 1,648	Female 1,638	3,286	Death Rate per 1,000	{ Crude	..	..	11.6
						{ Adjusted by A.C.F.	..	..	12.8
					Ratio of Local Adjusted Death Rate to National Rate	..	..	..	1.09
Deaths Under one year	Male 58	Female 32	90	Death Rate per 1,000 Live Births	..	..	..	..	21.0
Deaths - Legitimate Infants	..	..	78	Death Rate per 1,000 Legitimate Births	..	..	..	..	20
Deaths - Illegitimate Infants	..	..	12	Death Rate per 1,000 Illegitimate Births	..	..	..	..	26
Neo-natal Deaths	..	..	..	57	Death Rate per 1,000 Live Births	..	..	..	13
Early Neo-natal Deaths	..	..	..	46	Death Rate per 1,000 Live Births	..	..	..	11
Peri-natal Deaths	..	..	..	106	Death Rate per 1,000 Total Births	..	..	..	24
Maternal Deaths	..	..	..	2	Death Rate per 1,000 Total Births	..	..	..	0.46

II—AREA AND POPULATION

The area of Cardiff (land and inland water but excluding foreshore) is 19,941 acres.

According to the Census of 1961, the population of Cardiff was 256,270 (males 123,384, females 132,886).

The population at mid-1970, as estimated by the Registrar-General, was 284,010 and it is on this figure that the vital statistics for 1970 are computed.

III—BIRTHS

The numbers of births and still-births occurring and allocated to Cardiff during 1970 sub-divided according to sex and legitimacy are shown on Table I.

Live-births and crude rates per 1,000 population are compared with the England and Wales figures for the past ten years in Table II.

Still-birth statistics and illegitimate birth figures are shown in Tables III and IV respectively.

Table I Live Births

	Legitimate	Illegitimate	Total
Males	1,968	220	2,188
Females	1,863	242	2,105
TOTAL	3,831	462	4,293

Still Births

	Legitimate	Illegitimate	Total
Males	32	2	34
Females	23	3	26
TOTAL	55	5	60

Table II Live Births

Year	Population	Legitimate Births	Illegitimate Births	Total	Birth Rate	England and Wales Birth Rate
1960	255,470	4,592	242	4,834	18.92	17.1
1961	256,900	4,652	316	4,968	19.34	17.4
1962	260,160	4,613	366	4,979	19.14	18.0
1963	260,640	4,863	395	5,258	20.17	18.2
1964	260,340	4,635	441	5,076	19.50	18.4
1965	260,170	4,439	436	4,875	18.74	18.0
1966	259,700	4,123	498	4,621	17.79	17.7
1967	* 281,750	4,211	508	4,719	16.7	17.2
1968	287,460	4,212	488	4,700	16.4	16.9
1969	285,860	3,922	450	4,372	15.3	16.3
1970	284,010	3,831	462	4,293	15.1	16.0

**Estimated Mid-year population'

Table III

Still Births

Year	Legitimate	Illegitimate	Total	Rate per 1,000 Total Births	
				Cardiff	England and Wales
1960	99	7	106	21.46	19.7
1961	91	9	100	19.73	18.7
1962	89	8	97	19.11	18.1
1963	74	11	85	15.91	17.3
1964	87	3	90	17.42	16.3
1965	67	10	77	15.55	15.7
1966	77	8	85	18.06	15.4
1967	54	11	65	13.6	14.8
1968	53	12	65	13.6	14.3
1969	60	12	72	16.2	13.0
1970	55	5	60	13.8	13.0

Table IV

Year	Live	Still	Total	Rate per 1,000 Total Births	
				Cardiff	
1960	242	7	249	50.4	
1961	316	9	325	64.1	
1962	336	8	374	73.7	
1963	395	11	406	75.99	
1964	441	3	444	85.95	
1965	436	10	446	90.01	
1966	498	8	506	107.5	
1967	508	11	519	108.5	
1968	488	12	500	104.9	
1969	450	12	462	104.0	
1970	462	5	467	107.3	

IV—DEATHS

Deaths from all Causes – The total number of deaths from all causes and at all ages registered during the year and allocated to Cardiff was 3,286 (1,648 males and 1,638 females). The total number of deaths registered in Cardiff was 3,367 but 570 of these were deaths of non-residents which occurred mainly in hospitals and nursing homes, and 489 deaths of residents of Cardiff occurred and were registered in other areas. Allowance has been made for these outward and inward transferable deaths in arriving at the net number.

The following is a comparison of the death-rate for 1970 and the preceding ten years with the death rates for England and Wales for the same period.

Year	Deaths	Crude Death Rate	England and Wales Death Rate
1960	2,810	10.99	11.5
1961	2,946	11.47	11.9
1962	2,991	11.50	11.9
1963	3,040	11.66	12.2
1964	2,800	10.76	11.3
1965	2,811	10.80	11.5
1966	3,016	11.61	11.7
1967	3,059	10.9	11.2
1968	3,367	11.7	11.9
1969	3,326	11.6	11.9
1970	3,286	11.6	12.8

Cancer.—The number of deaths from malignant neoplasms including 9 deaths from leukaemia and aleukaemia was 615 (313 males and 302 females). The deaths are classified according to age and localisation of the disease in the Table on page 6. The total cancer deaths excluding leukaemia and aleukaemia for the previous ten years are shown below.

Year	No. of Deaths			Death Rate
	Males	Females	Total	
1960	269	220	489	1.91
1961	266	255	521	2.02
1962	296	253	549	2.11
1963	328	252	580	2.23
1964	282	228	510	1.96
1965	330	205	535	2.06
1966	314	277	591	2.28
1967	344	321	665	2.36
1968	333	298	631	2.11
1969	347	269	616	2.15
1970	308	298	606	2.17

Deaths from Motor Vehicle Accidents.—The number of deaths due to motor vehicle accidents in the year was 26 (19 males and 7 females) as compared with 39 deaths during 1969. The average for the preceding ten years (1960–69) was 38.

Other Accidents.—Other accidents total 61 (23 males and 38 females) and of that number 21 were under 65 years of age; 8 of them being under 45 years.

Maternal Mortality.—There were two maternal deaths during the year.

1. Mrs. —, aged 20, at home.
Pulmonary embolism due to pelvic vein thrombosis due to cystitis and pyelonephrosis following recent childbirth.
2. Mrs. —, aged 19, in hospital.
Cardiac arrest during anaesthesia for evacuation of retained placental tissue. Subsequent to induced abortion. "Misadventure".

Infant Mortality.—The number of deaths under 1 year was 90 and of those 78 were legitimate and 12 illegitimate. There were 46 deaths of infants under 1 week and when the 60 still-births are added, the peri-natal mortality rate is 24.4. The neo-natal deaths numbering 57 being 63% of the total deaths.

The table below compares the infant mortality rate with the preceding 10 years and with the rates for England and Wales.

Year	Infant Deaths			Neo-natal Deaths			Still Births		
	No.	Rate per 1,000 Live Births		No.	Rate per 1,000 Live Births		No.	Rate per 1,000 Total Births	
		Cardiff	E. & W.		Cardiff	E. & W.		Cardiff	E. & W.
1960	119	24.62	21.7	89	18.41	15.6	106	21.46	19.7
1961	120	24.15	21.4	77	15.49	15.5	100	19.73	18.7
1962	131	26.31	20.7	99	19.88	15.1	97	19.11	18.1
1963	130	24.72	20.9	92	17.49	14.2	85	15.91	17.3
1964	110	21.67	20.0	82	16.15	13.8	90	17.42	16.3
1965	111	22.77	19.0	63	12.92	13.0	77	15.55	15.7
1966	102	22.07	19.0	71	15.36	12.9	85	18.06	15.4
1967	100	21.2	18.3	62	13.1	12.5	65	13.6	14.8
1968	100	21.3	18.0	74	15.7	12.3	65	13.6	14.0
1969	83	19.0	18.0	55	12.6	12.0	72	16.2	13.0
1970	90	21.0	18.0	57	13.0	12.0	60	13.8	13.0

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death up to one year of age during 1970.

CAUSES OF DEATH		Under 1 day	1-6 days	1 week	2 weeks	3 weeks	Total under 4 weeks	1 month	2 months	3-5 months	6-8 months	9-11 months	Total All Ages
1. Infective and Parasitic													
0039 Salmonella infection without mention of food	..	—	—	—	—	—	—	1	1	—	—	—	1
0092 Gastro-enteritis and Colitis	..	—	—	—	—	—	—	—	—	—	—	—	2
005 Measles	..	—	—	—	—	—	—	—	—	—	—	1	1
2. Endocrine, Nutritional and Metabolic Diseases													
2718 Other congenital disorders of carbohydrate metabolism	..	—	—	—	—	—	—	1	—	1	—	—	1
2730 Cystic fibrosis	..	—	—	—	—	—	—	—	—	—	—	—	1
3. Nervous System and Sense Organs													
3479 Other diseases of the brain	..	—	—	—	—	—	—	—	—	—	—	1	1
4. Circulatory System													
422 Acute myocarditis	..	—	—	—	—	—	—	2	1	—	—	—	2
425 Cardiomyopathy	..	—	—	—	—	—	—	—	—	—	—	—	1
4272 Heart block	..	—	—	—	—	—	—	—	—	—	—	1	1
5. Respiratory System													
466 Acute bronchitis and bronchiolitis	..	—	—	—	—	—	—	—	—	1	2	—	3
480 Viral pneumonia	..	—	—	—	—	—	—	1	—	—	—	—	1
485 Bronchopneumonia, unspecified	..	—	—	1	1	—	2	—	—	—	1	—	3
486 Pneumonia, unspecified	..	—	1	—	—	—	1	—	—	—	—	—	1
5199 Other diseases of respiratory system	..	—	—	—	—	—	—	—	—	—	1	—	1
6. Digestive System													
5309 Other diseases of oesophagus	..	—	1	—	—	—	1	—	—	—	—	—	1
7. Genito-urinary System													
5901 Other pyelonephritis, pyelitis and pyelocystitis	..	—	—	—	—	—	—	1	—	—	—	—	1
8. Congenital Anomalies													
740 Anencephalus	..	—	1	—	—	—	1	—	—	—	—	—	1
7410 Spina bifida with hydrocephalus	..	—	—	—	1	—	1	—	—	1	—	—	2
7431 Microcephalus	..	1	—	—	—	—	1	—	—	—	—	—	1
7461 Transposition of great vessels	..	—	1	—	—	—	1	—	—	—	—	—	1
7466 Anomalies of heart valves	..	—	—	—	—	—	1	—	—	—	—	—	1
7469 Unspecified anomalies of heart	..	—	—	1	—	—	1	—	—	—	—	1	2
7471 Coarctation of aorta	..	—	—	—	—	—	—	—	—	—	—	—	1
7510 Meckel's diverticulum	..	—	—	1	—	—	1	1	—	—	—	—	1
7512 Atresia and stenosis of rectum and anal canal	..	—	—	—	—	—	—	—	—	—	—	—	1
7516 Anomalies of gall-bladder, bile ducts and liver	..	—	1	—	—	—	1	—	—	1	—	—	1
7530 Renal agenesis	..	1	—	—	—	—	—	—	—	—	—	—	1
9. Certain Causes of Peri-natal Morbidity and Mortality													
7660 Difficult labour with injury to brain	..	1	—	—	—	—	1	—	—	—	—	—	1
7694 Multiple pregnancy	..	5	1	—	—	—	6	—	—	—	—	—	6
7720 Birth injury to brain	..	6	4	1	—	—	11	—	—	—	—	—	11
7762 Respiratory distress syndrome	..	5	7	1	—	—	13	—	—	—	—	—	13
7764 Intra-uterine anoxia	..	5	—	—	—	—	5	—	—	—	—	—	5
7769 Asphyxia of newborn, unspecified	..	1	—	1	—	—	1	—	—	—	—	—	1
777 Immaturity, unqualified	..	4	2	2	—	—	7	1	—	—	—	—	7
10. Symptoms, Ill-defined Conditions													
795 Sudden death (cause unknown)	..	—	—	—	—	1	1	2	—	5	1	—	9
11. External Cause of Injury													
9250 Home wiring and appliances	..	—	—	—	—	—	—	—	—	—	—	1	1
968 Assault by unspecified means	..	—	—	—	—	—	—	—	—	—	1	—	1
TOTAL	..	25	21	8	2	1	57	10	2	10	6	5	90
PERCENTAGE	..	27.8	23.3	9.0	2.2	1.1	63.3	11.1	2.2	11.1	6.6	5.6	

The following table, compiled from figures supplied by the Registrar-General, shows the causes of death at various ages during 1970

CAUSES OF DEATH	ALL AGES			AGE IN YEARS								65-74 yrs.	75 yrs. and over
	M.	F.	Total	Under 4 wks.	4 Wks. - 1 year	1-4 yrs.	5-14 yrs.	15-24 yrs.	25-34 yrs.	35-44 yrs.	45-54 yrs.	55-64 yrs.	
4. Enteritis and other diarrhoeal diseases	1	4	5	—	2	—	—	—	—	1	—	1	1
5. Tuberculosis of Respiratory System	4	5	9	—	—	—	—	—	—	1	—	5	2
6. (1) Late effects of Respiratory Tuberculosis	4	1	5	—	1	—	—	—	—	2	—	—	—
14. Measles	—	1	1	—	—	—	—	—	—	—	—	—	3
17. Syphilis and its sequelae	1	5	6	—	1	—	—	—	—	1	—	1	—
18. Other infective and parasitic diseases	5	2	7	—	—	—	—	—	—	2	—	1	—
19. (1) Malignant Neoplasm, Buccal Cavity, etc.	4	9	13	—	—	—	—	—	—	1	—	2	—
19. (2) Malignant Neoplasm, Oesophagus	8	2	10	—	—	—	—	—	—	2	—	1	—
19. (3) Malignant Neoplasm, Stomach	46	31	77	—	—	—	—	—	—	19	—	32	8
19. (4) Malignant Neoplasm, Intestine	28	46	74	—	—	—	—	—	—	14	—	24	31
19. (5) Malignant Neoplasm, Larynx	2	—	2	—	—	—	—	—	—	3	—	—	—
19. (6) Malignant Neoplasm, Lung, Bronchus	122	28	150	—	—	—	—	—	—	13	—	46	34
19. (7) Malignant Neoplasm, Breast	—	55	55	—	—	—	—	—	—	1	—	15	13
19. (8) Malignant Neoplasm, Uterus	—	30	30	—	—	—	—	—	—	5	—	16	8
19. (9) Malignant Neoplasm, Uterus	15	3	18	—	—	—	—	—	—	2	—	6	8
19. (10) Malignant Neoplasm, Prostate	4	—	4	—	—	—	—	—	—	1	—	4	—
19. (11) Other Malignant Neoplasms	85	97	180	—	—	—	—	—	—	19	—	47	41
20. Benign and Unspecified Neoplasms	12	4	16	—	—	—	—	—	—	2	—	2	20
21. Diabetes Mellitus	15	25	39	—	—	—	—	—	—	5	—	10	1
22. Avitaminoses, etc.	2	2	4	—	—	—	—	—	—	1	—	—	3
46. (1) Other endocrine, etc. diseases	2	7	9	—	—	—	—	—	—	—	—	—	8
23. Anaemias	—	1	1	—	—	—	—	—	—	—	—	—	2
46. (2) Other diseases of blood, etc.	3	6	9	—	—	—	—	—	—	1	—	—	—
46. (3) Mental Disorders	—	3	3	—	—	—	—	—	—	3	—	—	—
46. (4) Multiple Sclerosis	22	17	38	—	—	—	—	—	—	2	—	8	16
46. (5) Other diseases of nervous system	18	20	38	—	—	—	—	—	—	4	—	14	14
26. Chronic rheumatic heart disease	38	38	76	—	—	—	—	—	—	6	—	22	29
27. Ischaemic heart disease	518	427	945	—	—	—	—	—	—	19	—	165	404
28. Other forms of heart disease	55	81	136	—	—	—	—	—	—	3	—	35	86
29. Cerebrovascular disease	120	233	353	—	—	—	—	—	—	11	—	116	188
30. Other diseases of circulatory system	68	67	135	—	—	—	—	—	—	6	—	36	77
31. Influenza	19	26	45	—	—	—	—	—	—	2	—	4	19
32. Pneumonia	82	130	212	—	—	—	—	—	—	4	—	15	49
33. (1) Bronchitis and Emphysema	138	31	169	—	—	—	—	—	—	2	—	38	152
33. (2) Asthma	6	6	12	—	—	—	—	—	—	1	—	5	67
46. (7) Other diseases of respiratory system	15	15	30	—	—	—	—	—	—	4	—	8	13
34. Peptic Ulcer	12	7	19	—	—	—	—	—	—	1	—	1	8
35. Appendicitis	1	—	1	—	—	—	—	—	—	—	—	—	—
36. Intestinal obstruction and hernia	3	5	8	—	—	—	—	—	—	—	—	—	7
37. Cirrhosis of Liver	3	5	8	—	—	—	—	—	—	3	—	1	3
46. (8) Other diseases of digestive system	15	18	33	—	—	—	—	—	—	2	—	9	16
38. Nephritis and Nephrosis	5	5	10	—	—	—	—	—	—	1	—	4	3
39. Hyperplasia of prostate	8	—	8	—	—	—	—	—	—	1	—	5	4
46. (9) Other diseases, genito-urinary system	7	12	19	—	—	—	—	—	—	1	—	—	12
40. Abortion	1	1	2	—	—	—	—	—	—	—	—	—	—
41. Other complications of pregnancy, etc.	—	1	1	—	—	—	—	—	—	—	—	—	—
42. (11) Other diseases of musculo-skeletal system	3	9	12	—	—	—	—	—	—	1	—	—	7
46. (12) Congenital anomalies	18	7	25	—	—	—	—	—	—	1	—	3	—
43. Birth injury, difficult labour, etc.	24	9	33	—	—	—	—	—	—	—	—	2	—
44. Other causes of perinatal mortality	5	6	11	—	—	—	—	—	—	—	—	—	—
45. Symptoms of ill defined conditions	8	21	29	—	—	—	—	—	—	—	—	—	15
47. Motor vehicle accidents	19	7	26	—	—	—	—	—	—	1	—	3	2
48. All other accidents	23	38	61	—	—	—	—	—	—	3	—	11	29
49. Suicide and self-inflicted injuries	17	15	32	—	—	—	—	—	—	5	—	7	3
50. All other external causes	3	1	4	—	—	—	—	—	—	—	—	2	—
ALL CAUSES	1,648	1,638	3,286	57	33	9	11	28	23	65	210	528	1,386
Percentage of Total Deaths				1.7	1.0	0.3	0.3	0.8	0.7	2.0	6.4	16.1	42.2

V—INFECTIOUS DISEASES

J. N. P. HUGHES, M.B., B.Ch., D.P.H.

Although no longer as significant an aspect influencing the public health as formerly, infectious diseases continue to affect the lives of people to a very considerable extent.

Whilst mortality from these causes is low, the morbidity and nursing value of a number of virus diseases ranging from the common cold and influenza to infectious mononucleosis and infective hepatitis is great. Our knowledge of precise epidemiology is hampered by diagnostic difficulties. Notification procedures, at best incomplete and often an indication only of prevalence, are hampered when the effects of a particular infecting agent are vague and ill defined or show a wide range of clinical or subclinical patterns. Infective hepatitis exemplifies the predicament of medical practitioners in this matter. Subclinical infections detectable only by virological laboratory techniques have been included in our returns as cases of the disease in the same way as the clinically identifiable occurrences whenever we have been informed of them. However, we have no indication of the extent of the occurrence of the subclinical infection of the disease in the community. During the year a study of each case of clinically confirmed infective hepatitis was undertaken. An account of this is included later in this section. I am particularly grateful to Mr. E. C. Read, Senior Specialist Public Health Inspector, and Mr. Bruce Williams, Student Public Health Inspector, and a number of his student colleagues who undertook the work involved in this study.

The effects of easy cheap travel abroad and the rapidly increasing popularity of foreign holidays are being reflected more in the field of infectious diseases in the city. Imported infections are now becoming common place. Constant vigilance is necessary and this aspect of work of the department is increasing and assuming greater importance once more. We constantly urge general practitioners to submit for bacteriological investigation specimens of all newly returned holiday makers from abroad who become ill.

The incidence of notifiable diseases compared with that of the previous ten years is shown in the following table:—

Disease	1970	1969	1968	1967	1966	1965	1964	1963	1962	1961	1960
Scarlet Fever	27	19	32	71	106	73	63	60	69	121	93
Whooping Cough	33	6	46	84	109	32	200	218	21	107	414
Diphtheria	—	—	—	—	—	—	—	—	—	—	—
Measles	1,019	1,541	171	1,948	1,781	1,322	1,682	3,594	1,028	6,238	137
Meningococcal Infection	—	13	9	1	1	—	17	4	2	1	3
Paralytic Acute Poliomyelitis ..	—	—	—	—	—	—	—	—	8	1	—
Non-paralytic Poliomyelitis ..	—	—	—	—	—	—	—	—	2	8	2
Acute Encephalitis Infective ..	—	—	—	—	—	1	—	—	—	—	—
Acute Encephalitis (post infectious) ..	2	—	4	5	—	—	—	1	—	—	—
Dysentery	30	56	29	64	50	355	33	97	207	77	139
Ophthalmia Neonatorum ..	1	—	1	3	—	5	2	2	3	2	19
Paratyphoid Fever ..	1	—	—	—	—	2	—	6	—	2	1
Typhoid Fever	1	—	—	2	—	—	—	2	2	—	1
Food Poisoning	56	36	50	61	26	32	46	52	46	56	163
Malaria	1	—	1	—	—	2	—	—	—	1	1
Anthrax	—	—	1	2	—	—	—	—	—	—	—
Smallpox	—	—	—	—	—	—	—	—	1	—	—
Leprosy	—	—	—	1	—	—	—	—	—	—	—
Infective Jaundice ..	256	81	45	(Notifiable from 15th June, 1968)				—	—	—	—

Note—Statistics relating to tuberculosis and venereal disease are reported upon later in this section.

Measles

The number of notified cases was 1,019. There was one death due to measles and bronchopneumonia in a female child aged 10 months. The graph following illustrates well the beneficial effect of immunization against measles on the incidence of notified cases. As previously noted the well marked biennial incidence has been eliminated, probably by the immunization procedure. However, it will be some years yet before we attain our target of obliterating this infection.

Whooping Cough

Thirty-three cases were notified. Of these twenty had not been immunised; of the remainder eight had received only the first injection, three had three injections but not the booster and two had received the full course.

Rubella

During the year routine immunization of girls at 13 years was introduced in the city against Rubella. This followed extensive trials of the effectiveness of this procedure in which the department had taken part. It is hoped that by the end of the next decade the effect of this addition to the programme of recommended routine immunization will be reflected by a fall in incidence of cases of handicap in infants due to rubella syndrome.

Typhoid and Paratyphoid Fevers

There was one case of typhoid fever and one case of paratyphoid fever during the year. Both patients had recently returned from holidays abroad; details are as follows.

Typhoid fever, (patient WH), a male, aged 63 years. Travelled on a "Package" holiday to Spain in July 1970. He developed a pyrexia of unknown origin 17 days after his return, was admitted to Llandough Hospital four days later and was subsequently transferred to Lansdowne Hospital when the cause of his illness was diagnosed. *Salmonella typhi* (Vi phage type El) was isolated from stool cultures. Household contacts, together with members of his party who had stayed at the same hotel were all investigated and found to be negative.

Paratyphoid fever (patient AG), a male, aged 19 years. Went on an eleven day Mediterranean cruise in May 1970 and visited ports in Italy, Greece, Turkey and Yugoslavia. He was admitted to Lansdowne Hospital in June with a pyrexia of unknown origin after being ill at home for seven days. Blood and stool cultures showed *Salmonella paratyphi* B (phage type Taunton). In spite of therapy with Chloramphenicol and later with Ampicillin his stools remained positive; because his general health had returned to normal he was discharged from hospital in mid-July as a temporary carrier under the supervision of this department. Negative faecal specimens were obtained in August and he was visited and sampled at intervals to confirm that he was no longer carrying this infection.

No other members of his party were found to be infected with the exception of one person who was found to be a symptomless excreter of *Salmonella derby*.

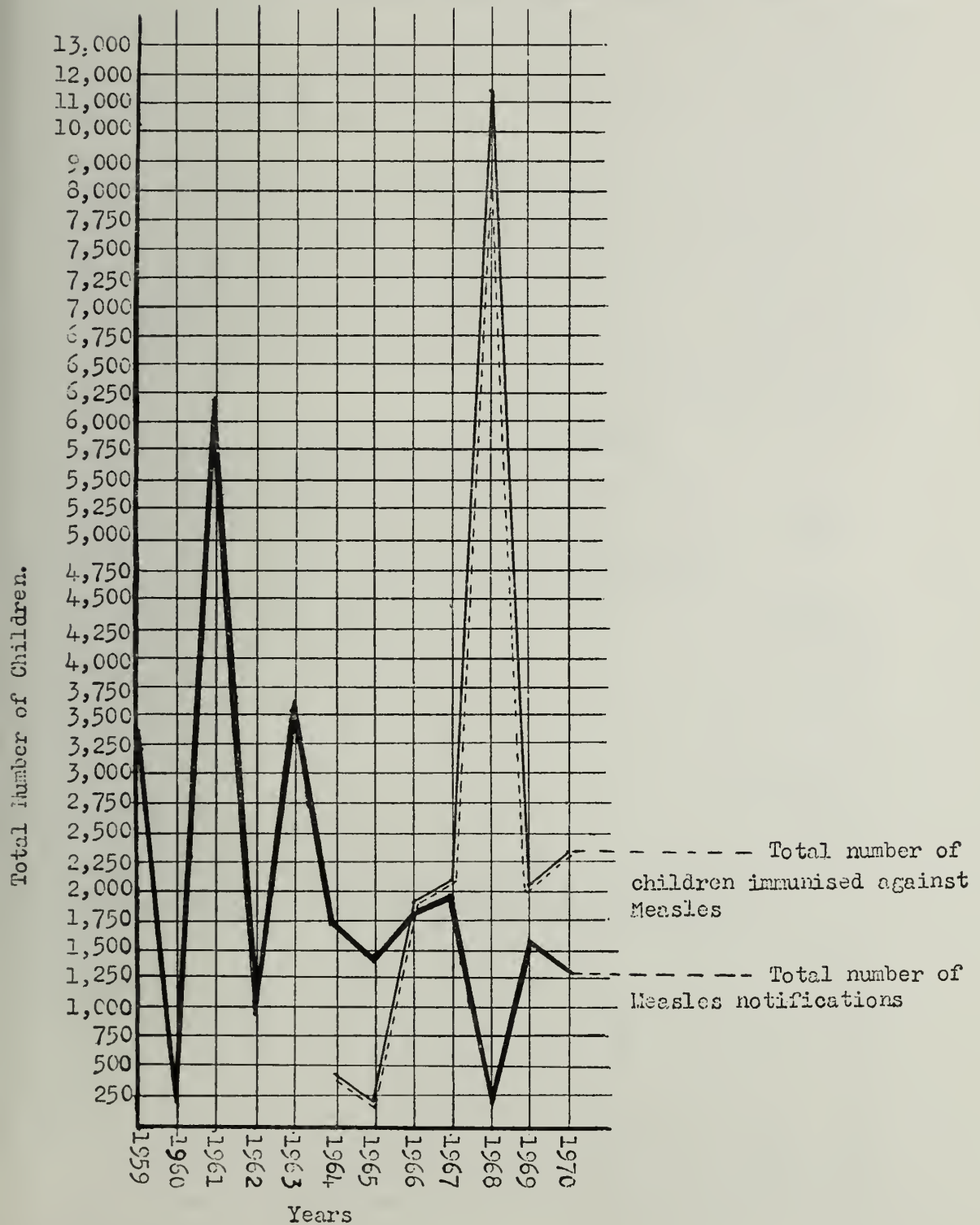
Imported Diseases

As in other years reports were received from the Welsh Office and other Medical Officers of Health regarding typhoid and paratyphoid B infections occurring in persons who had recently returned from travelling abroad.

Contacts of these cases living in the Cardiff area were all investigated and found to be free from infection.

Due to the enormous growth in the number of persons travelling abroad and the speed of travel the importation of infectious diseases becomes an ever increasing problem. Many of these diseases are not usually present in the traveller's home country and this can often cause delays in diagnosis, particularly in the early stages when the symptoms can resemble many common diseases with which the medical practitioner is familiar.

Table Showing the Number of Children Notified as Suffering from Measles Infection, and the Number Immunised



Food Poisoning

Fifty-six cases were notified; twenty-five cases were involved with "family" outbreaks, the remaining thirty-one being sporadic cases. It was not found possible to ascertain the cause of illness in seventeen cases but the remaining thirty-nine cases were all caused by *Salmonella* organisms – in sixteen cases by *Salmonella panama*.

There was one death from food poisoning: the patient, a male child born on 12th September was admitted to Llandough Hospital on the 4th October with a history of vomiting and abnormal motions and died on 12th October from meningitis following a septicaemia due to *Salmonella panama* infection.

It is of interest to note that the World Health Organisation reports* that death resulting from *Salmonella* infection is rare. Moreover, although a number of deaths are reported each year in association with *Salmonella* infection, it is difficult to be certain what part, if any, the infection played as a cause of death. There were 38 deaths in the United Kingdom in 1970 which were reported as being associated with *Salmonella* infection. In six cases, death was stated to have been attributable to other causes, and in another four no clear information about the cause of death was given. Four of the remaining 28 patients were infants who died in the neo-natal period. In nine cases, the patient was an adult under the age of 65 and fifteen were over this age, excluding one whose age was not stated.

*(World Health Organisation Weekly Epidemiological Record No. 9; 1971, 46, 73–80)

Details of incidents and cases are given in the following table in the form prescribed by the Department of Health and Social Security.

Food Poisoning — Incidents and Cases

Causative Agent	General Outbreaks		Family Outbreaks		Sporadic Cases Notified or ascertained	Total No. of outbreaks and sporadic	Total No. of cases
	No. of separate outbreaks	No. of cases notified or ascertained	No. of separate outbreaks	No. of cases notified or ascertained			
1. <i>S. typhimurium</i> ..	—	—	1	2	6	7	8
2. Other <i>Salmonellae</i> (a)	—	—	7	17	14	21	31
3. <i>Cl. welchii</i> ..	—	—	—	—	—	—	—
4. <i>Staph. aureus</i> ..	—	—	—	—	—	—	—
5. Other causes (b) ..	—	—	—	—	—	—	—
6. Cause unknown ..	—	—	3	6	11	14	17
7. Total	—	—	11	25	31	42	56

Food Poisoning due to *Salmonellae* other than *S. typhimurium*

<i>S. stanley</i>	—	—	1	2	—	1	2
<i>S. enteritidis</i> ..	—	—	2	5	1	3	6
<i>S. derby</i>	—	—	—	—	1	1	1
<i>S. panama</i>	—	—	3	8	8	11	16
<i>S. ibadan</i>	—	—	1	2	—	1	2
<i>S. st. paul</i>	—	—	—	—	1	1	1
<i>S. abony</i>	—	—	—	—	1	1	1
<i>S. westerstede</i> ..	—	—	—	—	1	1	1

Classification by Age and Sex of Infectious Diseases for 1970

DISEASE	under 1 year		1-2 years		2-3 years		3-4 years		4-5 years		5-10 years		10-15 years		15-20 years		20-25 years		25-35 years		35-45 years		45-65 years		65 years and over		All ages	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total	
Scarlet Fever	—	—	1	—	—	2	1	—	2	5	4	7	1	—	3	1	1	—	—	—	—	—	—	—	—	12	15	27
Whooping Cough	3	2	—	2	5	1	1	2	1	3	9	2	1	1	—	—	—	—	—	—	—	—	—	—	—	20	13	33
Diphtheria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles	31	31	64	73	64	53	60	57	65	60	238	202	6	8	1	2	1	1	—	1	—	1	—	—	—	530	489	1,019
Acute Meningitis	2	1	1	—	1	—	—	—	—	—	5	2	2	3	—	—	1	1	—	1	—	2	1	—	—	13	10	23
Paralytic Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Non-paralytic Acute Poliomyelitis	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute encephalitis infective	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Acute encephalitis post infectious	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	1	—	—	—	—	—	—	1	1	2
Dysentery	1	4	—	2	1	—	2	1	—	1	2	5	—	—	—	—	1	2	1	3	1	—	2	—	1	9	21	30
Ophthalmia Neonatorum	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1
Smallpox	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Paratyphoid Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	1	—	1
Enteric or typhoid (ex. paratyphoid)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	—	1
Food Poisoning	3	5	2	3	1	—	3	—	—	—	1	—	3	—	4	1	6	7	5	2	3	2	4	—	1	25	31	56
Typhus Fever	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Leprosy	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Malaria	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	1	—	1
Anthrax	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Infective Jaundice	—	—	—	—	—	—	5	1	6	11	49	51	17	26	15	14	13	7	10	8	5	6	2	5	1	4	123	133
																												256

NOTE: Statistics relating to Tuberculosis and Venereal Disease appear later in this section.

Smallpox

No cases occurred in Cardiff during the year.

As a result of notifications received from Port Medical Officers in accordance with the Public Health (Aircraft) Regulations, 1966 and the Public Health (Ships) Regulations, 1966, 28 persons were placed under surveillance.

Infective Jaundice

Infective jaundice has been generally notifiable since 15th June, 1968; it was hoped that notification would enable medical officers to obtain more precise information concerning its incidence and the circumstances in which the various forms of this disease are spread.

To this end it was decided to carry out a survey of all cases coming to the attention of the Department in 1970. Having regard to the experience of 1968 (45 cases notified) and 1969 (81 cases notified) the work involved proved to be greater than had been anticipated as, in all, 299 cases had to be investigated in 1970. Of these, 256 were notified by medical practitioners; the remaining 43 cases were ascertained from other sources, mainly in the regular reports which are received from head teachers regarding absentees from school due to illness.

With the exception of three patients who were residing outside the city by the time they were notified, all cases were investigated using a standard enquiry form devised by the department.

It will be seen from Table A that the majority of cases occurred amongst children between 5 and 10 years of age, followed by age groups 10–15 and 15–20. The age group 5–20 comprises 232 cases out of a total of 299 – approximately 70% of all cases. This finding is in keeping with the world-wide distribution of cases which is most common among school-age children and young adults.

The mode of transmission is believed to be by person to person contact, the predominance of cases in this group is no doubt due to the environmental changes taking place at this time; the child ceases to spend most of its time at home and passes through various schools and finally commences employment.

The geographical distribution of cases was found to follow a predictable pattern with the majority occurring in areas with a high population of children and persons in the lower age groups.

The majority of patients were treated at home. Twenty-nine patients (17 males, 12 females) were admitted to hospital. With the exception of two patients treated at Cardiff Royal Infirmary the remainder were patients at Lansdowne Hospital. The age and sex distribution of these patients is given in Table C.

There were 33 "Family Outbreaks" (two or more cases in the same family) comprising a total of 70 cases. The composition of cases is illustrated in Table D. In nine families all the patients were ill at the same time (19 cases) and in 24 families there was an interval of four to six weeks between the occurrence of secondary infections (51 cases).

An examination of case histories was made to ascertain the number of patients who had attended a hospital during the six month period prior to the onset of their illness. It was found that six persons had been hospital out-patients and seven persons had spent some period of time in hospital during which time three had operations.

The enquiry regarding pet animals produced no significant information other than to confirm the popularity of dogs, cats, cage-birds and tropical fishes (in that order). Approximately one-third of the households visited had no pets at all.

It is perhaps disappointing that the survey produced no new evidence to encourage any further avenue of enquiry to throw some light on the mode of spread of this disease.

TABLE A
Infective Jaundice – Known cases in Cardiff 1970
Distribution by Age, Sex and Occupation

OCCUPATION	0-5		5 -		10 -		15 -		20 -		25 -		30 -		35 -		40 -		45 -		50 -		55 -		60 -		65 +		Total		Total	
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
Below School Age	7	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	7	8	15	
School - Nursery	5	3	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	5	3	8	
- Infants	1	1	30	33	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	31	34	65	
- Junior	—	—	30	34	12	19	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	42	53	95	
- Grammar/Sec. Mod.	—	—	—	—	10	11	3	4	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	13	15	28	
- Higher Education	—	—	—	—	—	—	2	1	1	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	2	5	
- Special	—	—	3	—	—	2	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	4	7	
Manual Worker	—	—	—	—	—	—	8	—	3	—	2	—	3	—	2	—	—	—	—	—	1	—	1	—	—	—	—	—	19	1	20	
Shop or Office Worker ..	—	—	—	—	—	—	1	5	8	2	2	1	3	—	2	2	—	1	1	—	—	—	1	—	1	—	—	—	18	11	29	
Unemployed	—	—	—	—	—	—	1	1	1	2	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	3	4	7	
Retired	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	4	5	
Housewife	—	—	—	—	—	—	—	—	—	2	—	4	—	3	—	2	—	1	—	1	—	—	2	—	—	—	—	—	—	—	15	15
TOTALS	13	12	63	67	22	32	15	13	13	7	4	5	6	3	4	5	—	1	1	1	1	—	—	4	2	—	1	4	145	154	299	

TABLE B
Infective Jaundice – Known Cases in Cardiff 1970
Factors in Case History during six months prior to illness

	0 –		5 –		10 –		15 –		20 –		25 –		30 –		35 –		40 –		45 –		50 –		55 –		60 –		65 +		Total			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total	
Blood Transfusions	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Blood Donations	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Blood Tests	1	—	4	2	1	—	1	—	1	—	—	—	1	—	—	—	—	—	1	—	—	—	—	1	—	—	—	2	6	9	15	
Dental Treatments – involving injections	3	—	2	5	3	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	10	6	16		
Dental Treatments – without injections	3	1	11	16	2	9	—	1	1	—	3	2	1	1	—	—	1	—	—	—	—	—	—	—	—	—	—	—	22	30	52	
Immunisation involving injections	1	—	7	8	2	2	1	3	2	1	—	1	—	1	—	1	—	—	—	—	—	—	—	—	—	—	1	16	14	30		
Insulin injections	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	
Other injections	—	—	3	—	—	1	1	—	1	1	—	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	1	7	3	10		
Treatment with antibiotics ..	5	2	15	15	—	3	1	1	1	1	—	1	1	—	1	1	1	—	—	—	—	—	—	—	—	—	—	23	24	47		
Treatment with other medicines	2	2	12	12	3	4	2	5	—	2	—	1	2	2	1	1	1	—	1	—	—	—	—	3	1	—	—	2	24	35	59	
Known Contact with case of Jaundice	4	4	28	24	9	12	2	5	4	2	1	3	—	—	1	1	1	—	—	—	—	—	1	—	—	—	—	50	52	102		
Significant illness in household	5	1	16	16	4	3	3	2	1	1	—	1	—	1	—	1	1	—	1	—	—	—	2	—	—	—	—	30	29	59		
Holidays away from home	7	5	19	25	10	10	3	5	7	2	2	3	2	—	2	—	—	—	1	—	—	—	—	—	—	—	—	52	51	103		
Previous History of Jaundice	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	1	—	1	
Operative Surgery	—	—	2	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	—	3	—	3	
Pet Animals in House ..	10	8	38	47	19	25	10	8	8	3	1	3	4	4	3	1	1	1	—	—	—	—	2	1	—	—	2	95	106	201		
No details	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	1	—
Not interviewed	—	—	—	1	—	2	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	3	—

TABLE C
Cases Admitted to Hospital

	0 –		5 –		10 –		15 –		20 –		25 –		30 –		35 –		40 –		45 –		50 –		55 –		60 –		65 +		Total			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	Total	
Lansdowne	1	—	2	6	—	1	—	1	3	2	2	2	1	1	—	—	—	—	—	—	1	—	—	—	1	—	—	1	2	11	16	27
Cardiff Royal Infirmary ..	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	1	1	2	
TOTAL	1	—	2	6	—	1	—	1	3	3	2	2	1	1	—	—	—	—	—	—	1	—	—	—	1	—	1	2	12	17	29	

TABLE D.
Infective Jaundice — Cardiff 1970
Outbreaks in Families

Number of Families	Persons ill in family				All patients ill at the same time	4-6 week interval between cases
	Adults		Children			
	M	F	M	F		
7	—	—	2	—	2	5
5	—	—	—	2	2	3
13	—	—	1	1	3	10
3	—	—	2	1	1	2
3	—	1	1	—	1	2
1	—	1	—	1	—	1
1	—	1	2	—	—	1
33	70 Cases				9	24

Venereal Diseases

The tables below give the statistics concerning venereal diseases treated in the city during 1970.

Treatment for Venereal Diseases	Total Cases					
	1966	1968	1969	1970		
				Male	Female	Total
New Cases						
Syphilis only	33	33	61	33	15	48
Gonorrhoea only	185	367	418	267	129	396
Other Conditions						
(a) Requiring treatment	710	949	1,251	784	444	1,228
(b) Not requiring treatment	238	242	398	277	287	564
(c) Not yet diagnosed	5	2	1	—	6	6
TOTALS	1,171	1,593	2,129	1,361	881	2,242
TOTAL ATTENDANCES	4,937	5,178	7,041	4,443	2,896	7,339
IN-PATIENT DAYS IN HOSPITAL	494	387	569	223	276	499

Age Groups	1969			1970		
	Male	Female	Total	Male	Female	Total
(a) SYPHILIS						
Under 16 years ..	—	—	—	—	—	—
16-18 years ..	—	—	—	—	1	1
19-24 years ..	15	8	23	9	6	15
25 years and over ..	26	12	38	24	8	32
	41	20	61	33	15	48
(b) GONORRHOEA						
Under 16 years ..	—	2	2	1	5	6
16-18 years ..	14	16	30	43	31	74
19-24 years ..	114	80	194	91	57	148
25 years and over ..	137	55	192	132	36	168
	265	153	418	267	129	396
(c) OTHER CONDITIONS ..						
Under 16 years ..	—	37	37	—	28	28
16-18 years ..	178	301	479	97	117	214
19-24 years ..	312	199	511	423	315	738
25 years and over ..	470	153	623	541	277	818
	960	690	1,650	1,061	737	1,798

The numbers show a welcomed halt in the previously observed pattern of annual increases in incidence of venereal diseases presenting for treatment. Although a small increase of some 9% in overall cases seen occurred, there was actually a decrease of 21% in cases of syphilis and a decrease of 5% in cases of gonorrhoea diagnosed in comparison with the previous years figures. An analysis of the tables actually consists of persons presenting for examination but being found not to require treatment.

It must be borne in mind however that this commendable reversal of trend in incidence over the past year comes after an overall increase of 84% in cases presenting annually at V.D. clinic over the previous eight years and an increase of no less than 34% between 1968 and 1969.

The age distributing and sex ratios show no change over those observed in recent years.

Tuberculosis

The following tables show a continuation in the long established decline in numbers of cases of known tuberculosis appearing on our registers. The incidence of new cases of both pulmonary and non-pulmonary tubercular infection, however, has remained at a similar level to last year. This is the first time for many years that no decrease has been shown, though the numbers involved are now so small that they possibly lose statistical significance on a population basis. Two specialist health visitors continue to be involved in this work and assist the physicians at the Chest Clinic in following up cases and contacts in the community. They continue to visit also all new immigrants to the city and ensure that they attend the Chest Clinic to eliminate the possibility of active tuberculosis infection.

As noted last year, a proportion of immigrants cannot be traced. This amounts to some 41 cases out of a total of 208 immigrants or 20% — exactly corresponding to the proportion untraceable in 1969. This gap in the totality of our surveillance is regretted but despite all efforts, language difficulties and fictitious addresses defeat our efforts.

Table I

Number of notified cases of pulmonary tuberculosis dying during 1970 where pulmonary tuberculosis was the direct cause of death or was mentioned as a contributory cause of death.

Age Groups				Number of deaths where Pulmonary Tuberculosis was given as the direct cause of death		Number of deaths where Pulmonary Tuberculosis was mentioned as a contributory cause of death	
				Males	Females	Males	Females
0-14 years	..	..	..	—	—	—	—
15-24 years	..	..	..	—	—	—	—
25-34 years	..	..	..	1	—	—	—
35-44 years	..	..	..	1	1	—	—
45-54 years	..	..	..	1	—	1	—
55-64 years	..	..	..	2	—	1	—
65 years and over	..	..	..	2	2	4	1
TOTAL	..	..	..	7	3	6	1

Table II

Giving the number of new cases of Tuberculosis during 1970 by age and sex

				Pulmonary		Total	Non-Pulmonary		Total
				Males	Females		Males	Females	
Under 1 year	..	..	..	—	—	—	—	—	—
1 year	..	..	..	—	1	1	—	—	—
2-4 years	..	..	..	—	1	1	—	—	—
5-9 years	..	..	..	3	3	6	—	—	—
10-14 years	..	..	..	2	1	3	—	—	—
15-19 years	..	..	..	3	—	3	—	—	—
20-24 years	..	..	..	2	1	3	1	—	1
25-34 years	..	..	..	5	4	9	2	2	4
35-44 years	..	..	..	7	1	8	2	3	5
45-54 years	..	..	..	8	4	12	—	1	1
55-64 years	..	..	..	8	2	10	1	2	3
65-74 years	..	..	..	4	2	6	3	—	3
75 years and over	..	..	..	3	1	4	—	2	2
TOTAL	..	..	..	45	21	66	9	10	19

The above table does not include the following:—

- One male pulmonary aged 91 years – Case not notified patient deceased.
- One male pulmonary aged 71 years – Case not notified patient deceased.
- One female pulmonary aged 71 years – Case not notified patient deceased.
- One female pulmonary aged 55 years – Case not notified patient deceased.

Table III

New cases of Non-Pulmonary Tuberculosis – Localisation and Sex

	Males	Females	Total
Nervous System	—	—	—
Meningitis	—	—	—
Intestines and Peritoneum	2	—	2
Vertebral Column	—	—	—
Bones and Joints	1	—	1
Cervical Glands	2	5	7
Other Organs (Including Skin)	—	1	1
Disseminated Tuberculosis	—	—	—
Genito-Urinary	4	4	8

Table IV

Giving the number of new cases of Tuberculosis and number on the Register during recent years

	1968	1969	1970
Number of new cases of Pulmonary Tuberculosis	83	68	66
Number of new cases of Non-Pulmonary Tuberculosis	15	13	19
Number of Pulmonary Tuberculosis cases on the register at the end of the year	2,456	2,354	2,246
Number of Non-Pulmonary Tuberculosis cases on the register at the end of the year	328	326	333

Table V

Giving the number of cases of Tuberculosis on the Register in Cardiff on 31st December, 1969 and 1970

	Pulmonary Tuberculosis		Total	Non-Pulmonary Tuberculosis		Total
	Males	Females		Males	Females	
Number of cases on register at 31.12.69	1,443	911	2,354	128	198	326
Number removed from register during 1970 through deaths from all causes	38	8	46	2	1	3
Number no longer traceable	4	3	7	2	—	2
Number removed during 1970 through leaving Cardiff to live elsewhere	15	6	21	—	1	1
Number removed during 1970 as recovery cases	45	60	105	2	5	7
Number of known cases who came from outside to live in Cardiff	3	2	5	—	1	1
Number of newly notified cases in 1970	45	21	66	9	10	19
Number of cases on the register at 31.12.70	1,389	857	2,246	131	202	333

Table VI

Immigrants 1970 (Long Stay)

Country of Origin	Number of Advice Notes Received *	Number successfully visited **	Number visited during 1970 in respect of advice notes received during 1969
COMMONWEALTH			
Caribbean	8	6	1
India	35	26	1
Pakistan	76	65	1
Other Asian	10	10	—
African	33	22	1
Others	4	3	—
NON-COMMONWEALTH			
European	19	18	—
Others	23	17	—
TOTAL	208	167	4

* Advice of Arrival of Immigrant.

** Where contact was established with Immigrant.

Of the 208 immigrants arriving in Cardiff during 1970, 41 have not been visited for the following reasons:—

- (a) 25 immigrants could not be traced because they left the area very shortly after arrival giving no forwarding address or else did not arrive at the address given.
- (b) 16 immigrants who arrived during the last quarter of 1970 have not yet been visited or traced but enquiries are still pending.

VI—PERSONAL HEALTH SERVICES

(National Health Service Acts, 1946–61)

CARE OF MOTHERS AND YOUNG CHILDREN

Vital Statistics

Live births (registered)	4,293
Live birth rate per 1,000 population	15.1
Illegitimate live births per cent of total live births	11.0
Still-births (registered)	60
Still-birth rate per 1,000 total live and still-births	13.8
Total live and still-births	4,353
Infant deaths	90
Infant mortality rate per 1,000 live births – total	21.0
Infant mortality rate per 1,000 live births – legitimate	20.0
Infant mortality rate per 1,000 live births – illegitimate	26.0
Neo-natal mortality rate per 1,000 live births	13.0
Early neo-natal mortality rate per 1,000 live births	11.0
Peri-natal mortality rate	24.0
Maternal mortality	
Number of deaths	2*
Rate per 1,000 total live and still-births	0.46

*See note under maternal deaths.

Live Births and Still-births – Sources of Notification

The following statement shows the number of live births notified as having occurred in Cardiff during 1970 according to the source of notification:—

<i>Notified by:</i>	<i>Live Births</i>	<i>Still-Births</i>	<i>Total</i>
Municipal Midwives	118	—	118
General Practitioner Delivery Unit	226	—	226
Private Midwives (Domiciliary)	—	—	—
Private Midwives (Nursing Homes)	8	—	8
Parents or Doctors	1	—	1
<i>Maternity Hospitals:</i>			
(a) Cardiff Maternity Hospital	3,096	42	3,138
(b) St. David's Hospital	2,465	51	2,516
	<u>5,914</u>	<u>93</u>	<u>6,007</u>

Notifications in respect of children born to residents of other authorities were as shown:

<i>Notified by:</i>	<i>Live Births</i>	<i>Still-Births</i>	<i>Total</i>
Municipal Midwives	—	—	—
Private Midwives (Domiciliary)	—	—	—
Private Midwives (Nursing Homes)	7	—	7
Parents	—	—	—
<i>Maternity Hospitals:</i>			
(a) Cardiff Maternity Hospital	633	10	643
(b) St. David's Hospital	880	22	902
	<u>1,520</u>	<u>32</u>	<u>1,552</u>

Transferred notifications of Cardiff cases were 41. Thus, after allowing for all transferred notifications, the number of Cardiff births notified was 4,496 and this figure was made up as follows:—

					<i>Live Births</i>	<i>Still-Births</i>	<i>Total</i>
Domiciliary	..	..	..	..	345	—	345
Institutional	..	..	..	..	4,089	62	4,151
							<hr/> 4,496 <hr/>

CARE OF MOTHERS AND YOUNG CHILDREN

F. MARIE RICHARDS, B.Sc., M.B., B.Ch., D.Obs.R.C.O.G., D.C.H., D.P.H.

Senior Medical Officer

A. CARE OF EXPECTANT MOTHERS

The hospital confinement rate reached a new level of 92% during 1970 and both the number of deliveries at home and in the G.P. Delivery Unit fell. Cardiff's birth rate dropped to 15.1. The graph on page 22 shows that over a period of thirty years Cardiff's birth rate has mainly followed the National trend but at a higher level. In 1967, however, it dropped to below the National level and has continued to do so. The expanding family planning services provided by the Local Health Authority, Hospitals and the Family Planning Association have undoubtedly played a part in the decline in the birth rate.

Ante-Natal Care

Attachment of local health authority nursing staff to general practitioners in Cardiff resulted in continued domiciliary midwife involvement in ante-natal care shared between hospital and family doctors. The large number of general practitioner ante-natal clinics caused some administrative problems in staffing and these are receiving attention.

Statistics 1970

No local authority doctors were involved in ante-natal clinics during 1970 but general practitioners staffed some of the 917 ante-natal sessions conducted by midwives in public health clinics. The average attendance was 7 expectant mothers and the total attendances numbered 5,309. These figures do not take into account the number of patients attending ante-natal clinics at general practitioners surgeries.

Maternal Deaths

There were two maternal deaths; the causes were as follows:—

1. Subarachnoid haemorrhage, essential hypertension, hysterotomy.
2. Pulmonary embolism, pelvic vein thrombosis, cystitis and pyelonephrosis, recent childbirth.

Care of the Unmarried Mother and Her Child

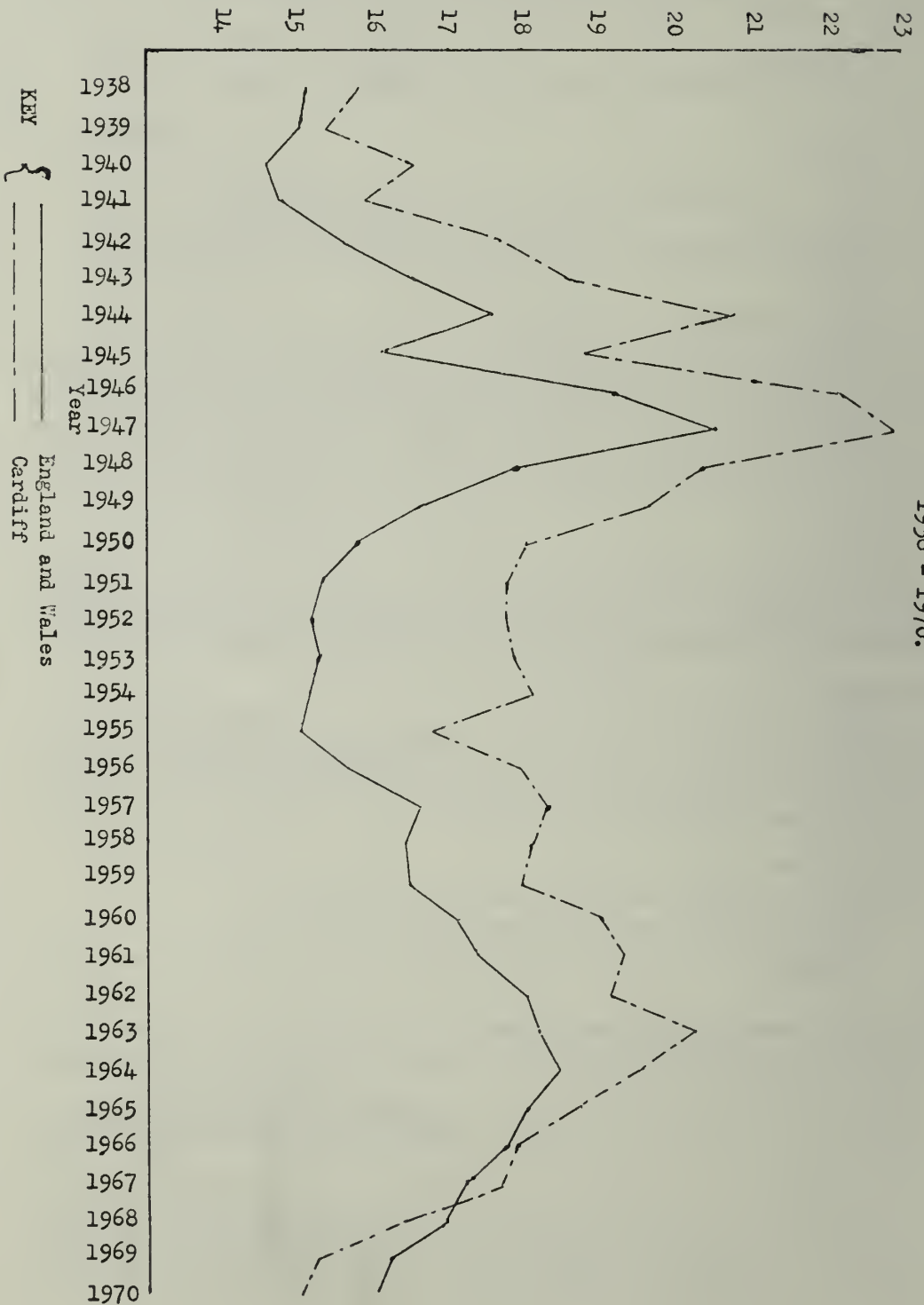
The illegitimate live birth rate in Cardiff in 1970 per 100 live births was 11.0. The total number of illegitimate births was 443.

During the year a closer liaison between social work departments in the maternity hospitals and the health visitors responsible for the care of the unmarried mother and her child was sought.

The medical aspects of the health visitors work with unmarried mothers was strengthened in preparation for transfer of statutory responsibility for social work to the social service department. In 1971 it is envisaged that a full-time health visitor will provide health services for the unmarried mother and her child in close liaison with her colleagues attached to general practice, with hospital social work and obstetric departments, and with the local authority social services department, thus ensuring continuity of care.

Birth rate per 1,000 population

Showing the Birth Rates for England and Wales, and Cardiff for the period
1938 - 1970.



Mothercraft and Relaxation

Talks, films, demonstrations and classes were held in the hospitals and in local authority clinics. The classes organised by domiciliary midwives, health visitors and physiotherapists provided a service for 171 patients.

The Short-Stay G.P. Delivery Unit at St. David's Hospital

This Unit is fulfilling a service for a small number of patients in Cardiff who prefer the continuity of care by general practitioners and the domiciliary midwife during pregnancy and delivery. A policy of no refusal for hospital confinement has been adopted in Cardiff for several years but to encourage the patients to take advantage of these facilities they have to be linked with provisions for short-stay in hospital and the consequent transfer of care during the post-natal period to the domiciliary field. The future of the Unit must come under review in an integrated maternity service but the concept of continuity of care with short-stay in hospital is something which is desirable at all times for maternity patients.

			<i>Number of deliveries in the G.P. Delivery Unit</i>	<i>Proportion of total deliveries by domiciliary midwives</i>
1964 (Sept. – Dec.)	..	..	15	—
1965	..	..	147	15%
1966	..	..	309	33%
1967	..	..	329	44%
1968	..	..	305	49%
1969	..	..	342	58%
1970	..	..	233	68%

Cardiff Area Maternity Services Liaison Committee

Two full meetings were held during 1970 and there was considerable activity at Sub-Committee level. The subjects requiring detailed discussion were all related to the integration of the maternity services and included:—

1. The provision of a central Bed Bureau for the University Hospital of Wales Area;
2. A review of the post-natal services in view of the high institutional confinement rate and early discharge of patients from hospital.

During 1970 the Chairman, Mr. M. D. Arwyn Evans, retired and Mr. R. C. Cummin was elected in his place.

B. BIRTH CONTROL AND FAMILY PLANNING

Family Planning Association

The Family Planning Association provides one session at Gabalfa Clinic, North Road, Cardiff, and three evening sessions at Cardiff Royal Infirmary.

Sessions and attendances were as follows:—

Number of sessions	..	..	..	..	..	527
Number of new patients	..	..	..	..	..	1,722
Total attendances	..	..	..	..	..	10,488

- 11 patients were referred by the local health authority.
- 291 patients were referred by general practitioners.
- 23 patients were referred by hospitals.
- 1,397 patients were referred from other sources (friends and other patients).

Vasectomy

During 1970 some 1,300 enquiries were received and interviews arranged in 470 cases. Vasectomy was performed in 411 males and at the end of the year there was a waiting list of approximately 800.

NATIONAL HEALTH SERVICE (FAMILY PLANNING) ACT, 1967

Local Authority Family Planning Service

Scope of the Service

This service has continued along the same lines as originally planned, viz:—

1. A general service, where a wide range of advice and treatment is provided and for which a small charge may be made for supplies.
2. A free service for families with special needs. This includes domiciliary help provided mainly by a specially appointed health visitor.
3. Joint Local Authority/Hospital Contraceptive Clinics. The successful clinic held at Cardiff Royal Infirmary since 1968 and staffed by doctors and nurses from local health authority and hospital departments continued and a similar clinic started at St. David's Hospital early in 1970.

Statistics 1970

Statistics relating to the Local Authority Family Planning Service are as follows:—

Sessions were held at ten local authority premises, once a week at the established clinics, and once fortnightly in the new clinics where attendances were small. The aim is to provide a weekly family planning session at each of the main clinics or health centres. There was an overall increase in the number of attendances.

Total number of attendances	..	..	..	..	5,196
Number of new patients seen	..	..	..	..	1,092
Advice only	..	..	..	..	275
Coil inserted	..	..	..	..	209
Pill prescribed	..	..	..	..	431
Cap given	..	..	..	..	124
Other methods	..	..	..	..	53

Advice was given on 570 occasions altogether during the year.

Free treatment was given to 262 patients.

Cervical cytology was done in 1,345 cases.

Seven doctors are at present providing the family planning service, usually at the rate of one or two sessions each per week. Some health visitors and midwives have expressed an interest in family planning and have attended training courses.

Domiciliary Service

1,307 domiciliary visits were made by the health visitor in connection with family planning advice to patients with special social needs and where necessary a doctor visited the home.

Co-ordination of all the family planning services provided in Cardiff is essential for the benefit of the community and efforts are continually being directed towards this end.

C. INFANT AND CHILD HEALTH

Infant Deaths

There were 90 infant deaths in 1970.

Weight at birth	PREMATURE LIVE BIRTHS													PREMATURE STILLBIRTHS
	Born in hospital			Born at home or in a nursing home										
				Nursed entirely at home or in a nursing home			Transferred to hospital on or before 28th day							
							Died			Total Births (5)			Died	
Total Births (1)	within 24 hrs. of birth (2)	in 1 and under 7 days (3)	in 7 and under 28 days (4)	within 24 hrs. of birth (6)	in 1 and under 7 days (7)	in 7 and under 28 days (8)	within 24 hrs. of birth (10)	in 1 and under 7 days (11)	in 7 and under 28 days (12)	in hospital (13)	at home or in a nursing home (14)			
1. 2 lb. 3 oz. or less ..	17	6	4	2	—	—	—	—	—	—	10	—		
2. Over 2 lb. 3 oz. up to and including 3 lb. 4 oz. ..	26	8	7	2	1	—	—	—	—	—	10	—		
3. Over 3 lb. 4 oz. up to and including 4 lb. 6 oz. ..	64	3	3	1	—	—	—	—	—	—	6	—		
4. Over 4 lb. 6 oz. up to and including 4 lb. 15 oz. ..	84	2	1	1	—	—	—	—	—	—	1	—		
5. Over 4 lb. 15 oz. up to and including 5 lb. 8 oz. ..	161	2	1	—	5	—	—	—	—	—	5	—		
6. TOTALS ..	352	21	16	6	6	—	—	—	—	—	32	—		

1—1,000g, or less; 2—1,001 – 1,500g; 3—1,501 – 2,000g; 4—2,001 – 2,250g; 5—2,251 – 2,500g.

Care of Premature Infants

Statistics relating to prematurity (after correction for transfers) are shown in the following tables and the table on page 25.

Number of Premature Live Births notified:

(a) In hospital	..	..	..	..	..	352
(b) At home or in a nursing home	..	..	..	..	..	6
						<hr/> 358 <hr/>

Number of Premature Still-Births notified:

(a) In hospital	..	..	..	..	..	32
(b) At home or in a nursing home	..	..	..	..	..	—
						<hr/> 32 <hr/>

Child Health Centres

The number of children who attended Child Health Centres in 1970 was 9,236. The average attendance of children at clinics was 40 and 1,676 sessions were held during the year, total attendances were 67,605.

Screening Tests in Infancy

(a) Phenylketonuria and Allied Metabolic Disorders

Routine screening using the Woelf amino-acid chromatography test continued. The service provided by the Department of Metabolic Medicine at Cardiff Royal Infirmary has resulted in comprehensive testing of newborn infants and requests for urine specimens following abnormalities discovered during screening numbered 175. Of these 12 tests were still abnormal and this fact was recorded on the child's record for future reference during developmental assessment. There were no cases of phenylketonuria or any other serious metabolic disorders requiring further investigation.

(b) Deafness

1,517 hearing tests on infants were performed by health visitors; 80 were referred by health visitors and 5 were found to have significant impairment of hearing.

(c) Congenital Malformations

Congenital malformations were reported as follows in 1970:—

Nature of Defect		Number of Defects	Incidence per 1,000 total births
Central nervous system	..	16	3.67
Cardio-vascular system	..	6	1.38
Alimentary system	..	10	2.30
Musculo-skeletal system	..	52	11.56
Genito-urinary system	..	10	2.30
Multiple abnormalities	..	6	1.38
Other .. .. .	..	39	8.97

Infants 'At Risk': the Observation Register: Assessment of the Young Handicapped Child

During 1970, there were 1,313 names on the 'At Risk' Register.

A summary of the 'At Risk' categories is shown below. Some of the children were recorded in more than one category.

1. Ante-natal abnormalities	..	..	..	..	201
2. Labour complications	..	..	..	..	610
3. Peri-natal history	..	..	..	..	213
4. Pre-maturity	..	..	..	..	254
5. Post-maturity	..	..	..	..	74
6. Congenital abnormalities	..	..	..	..	94
7. Family history of deafness	..	..	..	..	14
8. Family history of mental subnormality	..	..	..	..	10
9. Severe illness after the peri-natal period	..	..	..	..	3
10. Parents' suspicion of deafness	..	..	..	..	—
11. Speech delayed beyond the age of 2 years	..	..	..	..	—
12. Other	..	..	..	..	9
					<hr/> 1,482

A revised list of 'risk' categories will be used commencing January 1971.

Assessment of Handicapped Children

The register of potentially handicapped pre-school children (under 5 years) contained 678 names on December 31st, 1970. Many of these children were referred by health visitors as a result of developmental screening tests of infants 'At Risk' at 1 year and as a result of referrals by doctors in the health department and from paediatric reports from hospitals. Abnormalities included both physical defects and mental subnormality.

The distribution was as follows:—

Born in 1966	..	..	..	..	179
1967	..	..	..	..	163
1968	..	..	..	..	156
1969	..	..	..	..	126
1970	..	..	..	..	54
					<hr/>
TOTAL	..	..	..	..	678

During 1970 full medical assessments were carried out on 232 children, of these 159 were first examinations and 73 re-examinations.

1. Ordinary School	..	..	..	..	92
2. E.S.N. School	..	..	..	..	3
3. Presswood House (Diagnostic Unit)	..	..	..	..	9
4. Whitchurch Deaf Nursery	..	..	..	..	1
5. Partially Sighted Class	..	..	..	..	1
6. Greenhill Open Air School	..	..	..	..	4
7. Preswylfa Assessment Centre (Nursery School)	..	..	..	..	16
8. Ty Gwyn Training Centre	..	..	..	..	31
9. Ely Play Centre	..	..	..	..	1
10. Referred for follow-up	..	..	..	..	74
					<hr/> 232

Development Advisory Clinic at St. David's Hospital, Cardiff

A clinic began in September 1970, designed to provide an opportunity for parents of severely mentally handicapped children to discuss their problems with a paediatrician with special interest in handicap, a psychiatrist attached to a hospital for the mentally subnormal, and a medical officer working in the field of child development in the Cardiff Public Health Department.

Referrals from paediatricians, family doctors, health visitors and from the parents themselves have flowed steadily into the clinic which at present operates fortnightly. The aim of the service is to gather together all the information about the mentally handicapped child, identify the immediate problems and to try and resolve some of them in the best possible way with the full co-operation of the family. General practitioners are invited to join the group discussion between professional members which takes place after the clinic.

Some Defects of Infants and Pre-School Children

Visual Defects

Attended clinic for the first time	836
Examined for errors of refraction	229
Spectacles prescribed	151

Nose and Throat Defects

Number examined for the first time	302
Received operative treatment in hospital	25
Received other forms of treatment at clinic	26
Total attendances at clinic	377

PRESWYLFA HOUSE NURSERY SCHOOL AND ASSESSMENT CENTRE

SCHOOL MEDICAL OFFICER – GILLIAN M. BRYANT

M.B., B.Ch.(Wales), D.C.H., D.Obs.R.C.O.G.

Preswylfa has continued to function as a Nursery School for multiple handicapped children and as a long-term functional assessment unit.

During 1970 facilities were improved by the appointment by the Welsh Hospital Board of:—

- (a) A paediatrician with special interest in the handicapped child who has visited Preswylfa regularly on a weekly basis since September 1970, and whose advice is most valuable.
- (b) The appointment of a physiotherapist, who is employed by the University Hospital of Wales. She works mainly with the children who are actually in the School, but also outside school hours sees younger children who may eventually be admitted to the School and she liaises with the Hospital Consultants concerned in the care of each child. During the school holidays, she continued to treat the children, either at Preswylfa, at home, or at Llanrumney Public Health Clinic where sessions were arranged because of the large numbers of children living in that area.
- (c) The establishment of a Management Committee consisting of – the Head Teacher, visiting Medical Officers, Paediatrician, Child Psychiatrist, and representatives of the Local Authority Departments of Education and Health, and of the Welsh Hospital Board. This Committee has met twice a term under the Chairmanship of Dr. Ralph Evans and has functioned as a co-ordinating body.

Places to which children have been transferred since Preswylfa Nursery opened:—

Greenhill	10
Erw'r Delyn	1
Training Centre	4
Presswood House	1
Schools for visually handicapped	3
Non-communicating class	1
Ordinary nursery	1
Left area	1
	<hr/> 22 <hr/>

Types of Handicap and Waiting List

Major Diagnosis	Left Unit	Still attending January 1971	On waiting list Year of Birth			Total
			1967	1968	1969	
Spina Bifida ..	6	5	1	6	3	21
Cerebral Palsy	6	8	2	3	2	21
Visual						
Handicap ..	4	1	—	1	2	8
Brittle Bones ..	2	1	—	—	—	3
Communication						
Problems ..	3	1	1	—	—	5
Miscellaneous	1	5	1	2	—	9
	22	21	5*	12	7	67

*Includes two who at present have refused admission – both over-protected children who only attend Preswylfa for physiotherapy.

It can be seen from this table that a variety of handicaps are being catered for and also how the waiting list is gradually increasing in size.

At present, children are being admitted at about their third birthday, but a number would benefit from earlier admission on a part-time basis.

Proposed Extension

The Director of Education has agreed to the building of a 'Treatment Annexe' which will provide rooms for –

1. Physiotherapy;
2. Medical and psychological examinations;
3. A Staff Room which could also be used for interviews and case conferences.

This will release the fourth classroom which is at present used for all these purposes to return to its original use and provides room for probably a further six children if staff is made available.

The annexe would then be available for use for giving advice and treatment to young children outside school hours.

Age of Admission

At present children are being admitted at about their third birthday and this is probably as early as many of them are able to tolerate separation from home and mother for the whole day.

However, it is felt that children who are severely handicapped do need specialised help from a much earlier age than this, not merely the specialised hospital facilities that are already available, but general stimulation and encouragement to develop all their existing faculties.

These children can only tolerate attendance for a limited time, preferably with a parent present, and this also would provide an opportunity to discuss handling and other problems with the parents.

With transport problems and the needs of other family members, this sort of provision has to be at a very local level and Preswylfa can only supply this for a limited geographical area both when the Annexe is available.

Children living in other areas could be provided for at local clinics; the holiday provision of physiotherapists at Llanrumney Clinic is an example of this, and it is hoped to extend the idea of 'playgroups' for handicapped children at local clinics during the coming year.

D. SPECIAL CLINICS

Annexe to Cardiff Royal Infirmary

During 1970, 47 ante-natal mothers were referred to the clinic.

The following diagnoses were made:—

Syphilis	..	..	..	..	..	..	..	3
Gonorrhoea	..	..	..	..	..	..	..	4
Other conditions requiring treatment	..	..	..	..	..	..	..	19
Other conditions not requiring treatment	..	..	..	..	..	..	..	21
								<hr/> 47 <hr/>

The venereologist in charge of the clinic at Cardiff Royal Infirmary comments that there was a slight reduction in the total cases referred in 1970 and that the number of agencies referring cases was also reduced.

Those patients classified as suffering from 'other conditions' were mainly infected with *Trichomonas vaginalis*. Gonorrhoea occurred only slightly less frequently than in 1969 and there was no marked change in the incidence of syphilis.

The situation generally can be regarded as fairly satisfactory and the venereologist comments that on the whole there is an awareness of the need to screen patients in the ante-natal period. He adds that the present position should not allow complacency to develop in the early recognition of venereal disease.

Cervical Cytology – Cardiff Survey

Testing continued throughout 1970 and the total number of examinations remained about the same as in previous years, viz:

1965	..	..	..	..	8,068
1966	..	..	..	..	23,117
1967	..	..	..	..	22,394
1968	..	..	..	..	22,736
1969	..	..	..	..	22,696
1970	..	..	..	..	24,921
					<hr/> 123,932 <hr/>

The number of women who had their first cytology test in 1970 was 10,863, so that the total number of women who have been tested at least once since the beginning of the scheme in 1965 is now nearly 75,000. It is estimated that 75 per cent of these women live within the city boundary.

Over 13,000 women have now had a repeat examination at voluntary clinics two to three years after their first test (3,187 during 1970), over 3,000 have been recalled at twelve months because of a previous atypical smear (1,255 in 1970). The remainder of repeat tests have been taken at gynaecologists' clinics, family planning clinics, etc. at varying intervals. In addition, there were 1,394 consultations at Richmond Road Clinic (including 77 colposcope examinations) during 1970 for patients with abnormal cytology or for follow-up after treatment.

Door-to-door visiting was completed in all but the newly-built area of Llanedeyrn. The overall response rate is just over 60 per cent, and women previously untested because of refusal or failure to keep appointments are constantly being added to the total.

CERVICAL CYTOLOGY - CARDIFF SURVEY

Number of Patients Examined during 1970

	Examined for the first time	Repeat Examinations	Total	
			No.	%
Voluntary Clinics	3,195	6,035	9,230	37.0
Works and Office Premises	—	—	—	—
Home Tests by S.R.N.	917	58	975	3.9
Problem and Welfare Families and Local Health Authority Family Planning Clinics	348	1,137	1,485	6.0
Gynaecologists Clinics	3,854	4,375	8,229	33.0
Family Planning Association	1,297	1,437	2,734	11.0
General Practitioners	532	413	945	3.8
Radiotherapy	31	66	97	0.4
Glamorgan County Council Clinics (including Barry Family Planning Association)	689	537	1,226	4.9
TOTAL	10,863	14,058	24,921	100.0

E. NURSERIES AND CHILD MINDERS' REGULATION ACT, 1948, AS AMENDED

The statistics relating to 1970 are shown in the following table with those for the previous three years for comparison:—

	31.12.67	31.12.68	31.12.69	31.12.70
Number of premises registered	27	35	51	56
Number of children provided for	826	982	1,368	1,471
Number of Daily Minders registered	22	37	42	49
Number of children cared for by Daily Minders	329	450	396	378

Review of Play Facilities

Opportunities for play in nurseries was specially considered during 1970. In addition to the routine reports on the health and welfare of children being cared for by child minders and in private nurseries in Cardiff, health visitors were asked to comment on play facilities which were available and to classify them as follows:—

1. Creative play (painting, modelling, building, provision of Wendy House or corner, sand and water and dressing up).

2. Music and movement (dancing, singing, climbing, games and provision of indoor apparatus).
3. Special activities, e.g. provision of books, puzzles, etc.
4. Outdoor activities (outdoor play space, large toys and apparatus, e.g., swings, slides, sand and water).

Out of 68 nurseries (including childminders) which were assessed 55 (80%) were rated 'good' and 13 (20%) 'fair' according to the facilities available. Of those rated 'fair' the main reasons for this classification were as follows:—

1. Inadequate space for large toys and equipment.
2. Limited space for storage.
3. Insufficient play material.
4. Lack of imaginative staff attention.

Outdoor play space varied considerably and even when available was used in different degrees by nursery staff.

In many nurseries it was stated that special attention for lonely and handicapped children would be available but the need had not arisen and there were very few handicapped children attending nurseries. Lonely children seemed to integrate well into most groups.

In 22 nurseries staff had attended a Cardiff Local Education Department Course for persons working in nurseries and this sign of interest in the development and care of young children among persons not specifically trained in this work was encouraging.

THE NURSING SERVICES

MISS M. M. McCARTHY, SUPERINTENDENT NURSING OFFICER

The year 1970 was a period of consolidation for the Health Visiting and District Nursing Services following the major changes in work brought about by the general practice attachment which had taken place in 1967. The health visitors were the first nursing service to change completely to general practice attachment and have had a longer period to adjust to it. The majority find that their work is made more satisfying by the close relationship with the general practitioner, but there has been a change in the pattern of work. Frequent referral of urgent cases has made it difficult to cover as much routine visiting, and although the actual number of visits to schools increased in 1970, health visitors have found it difficult to meet the increasing demands on their time by the School Health Service.

Head teachers obviously feel in need of extra help and it seems probable that the solution will be found by providing nurses to work in the large comprehensive schools. These nurses would liaise with the health visitor for the follow-up of children's health problems at home and in the general practitioners surgery.

The district nurses have had a more difficult year. General practice attachment brought a greatly increased demand for nursing attention and there was also a very heavy sickness rate among staff in this section. Many general practitioners would like the nurses to undertake dressings and injections in the surgery, but the amount of nursing time available for this work has been limited by the amount of bedside nursing which has to be done in the home.

District Nurse Hospital Liaison Scheme

Since April 1970 a district nurse has been undertaking liaison work with a surgical team at the Cardiff Royal Infirmary. This is a pilot scheme and the nurse is attached to two wards only. She visits the hospital daily, joins in ward rounds, and interviews patients before they are discharged.

Since the scheme started 230 cases have been discharged from the two wards to the care of the district nurses. 122 of these were very early, and 108 were late post-operative cases. All these were referred for removal of sutures and dressings. The remaining 15 cases

discharged were inoperable and problem cases and it is this latter group that some of the most useful work has been done. The close link with the hospital has enabled the district nurse to prepare the home for the patient's arrival and the patient and the relatives have benefited from the continuity of care provided.

The Midwifery Service

The last group of student midwives taking the full domiciliary part two training, completed their course in June. All Cardiff students now train for three months at the Maternity Hospital and three months in the district. Although the number of patients delivered at home continue to decrease, student midwives have all attended at least two home deliveries, and six deliveries at the G.P. Unit. In addition they undertake a programme of training in community care.

DISTRICT MIDWIFERY SERVICE

Midwives in Practice

At the end of the year the midwives practising in the area were reported as follows:—

(a) Institutional

- (i) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act, 1946 141
- (ii) Midwives employed in Nursing Homes 4

(b) Domiciliary

Midwives employed by the Authority 18

Deliveries attended by Midwives

	DOMICILIARY CASES		Totals	Cases in Institutions
	Doctor not booked	Doctor booked		
(a) Midwives employed by the Authority ..	17	328	345	—
(b) Midwives employed by Hospital Management Committees or Boards of Governors under the National Health Service Act	—	—	—	5,591
(c) Midwives in Private Practice (including Midwives employed in Nursing Homes)	—	—	—	8
TOTALS	17	328	345	5,599

(This table related to women delivered, not, in the case of multiple births, to infants).

Statistics relating to Domiciliary Midwives

The statistics relating to the work of the service during 1970 are as follows:—

Early hospital discharges attended	1,421
48-hour hospital discharges attended	979
Housing visits to the above to arrange allocation of hospital beds	2,111
Total number of visits to patients during lying-in period	20,122
Total number of cases booked	419
Total number of cases attended	345

Part II Midwifery Training School:

Number of pupils entered school	..	..	..	..	..	52
Number of pupils entered examination	..	..	..	..	..	40
Number of pupils who passed at first attempt	..	..	..	..	..	31
Number of pupils who passed at second attempt	..	..	..	..	..	7
Number of pupils to re-sit examination in March 1971	..	..	..	..	..	1
Number of pupils who failed examination	..	..	..	..	..	1

Transport

At the end of the year motor car allowances were being paid to 15 midwives using their cars in connection with the Service.

Supervision

Officers of the Department made 150 visits of inspection of midwives.

Infectious Diseases arising from Childbirth

No cases were notified during the year.

Sterile Packs

Sterile packs are made available where necessary in all cases of confinement other than in National Health Service hospitals. The number supplied during the year was 400.

HOME NURSING SERVICE

The establishment consists of the equivalent of 54 full-time district nurses. In addition 31 student district nurses completed their training during the year. The statistics relating to the work of the service during 1970 are as follows:—

Number of new cases	..	..	..	..	..	4,087	
Cases carried over from 1969	..	..	..	..	..	1,466	
TOTAL						5,553	
Classification of cases and visits:						<i>Cases</i>	<i>Visits</i>
Medical	..	..	..	..	..	3,858	145,259
Surgical	..	..	..	..	..	1,653	32,082
Gynaecological	..	..	..	..	..	42	640
						5,553	177,981
Children under 5 years of age	..	..	..	..	..	80	
Patients over 65 years of age	..	..	..	..	..	3,356	

Laundry Service for Incontinent Patients

This service is now in its twelfth year and during 1970, 253 patients received this service.

Marie Curie Service for Cancer Patients

In 1970, 25 patients received this service on 85 nights from specially recruited nurses. This service is operated on behalf of the Marie Curie Foundation.

Night Relief Nurses

Thirty-six families received relief from nurses or night sitters on 512 nights in 1970, the tenth year since the inception of the service. The majority of patients receiving help were elderly, but some were younger people in the extreme stages of illness.

Incontinence Pads

More incontinence pads were used in 1970, especially where the requirements were short-term, e.g. when patients were awaiting hospital admission.

HEALTH VISITING

Home Visiting

A summary of the work carried out by Health Visitors is as follows:—

Children born 1970	..	..	1st Visit	..	..	3,932
Children born 1969	..	..	1st Visit	..	..	4,698
Children born 1965/68	..	..	1st Visit	..	..	10,254
Special care infants	..	..	1st Visit	..	..	225
Ante-natal visits	..	..	1st Visit	..	..	669
Unmarried mothers	..	..	1st Visit	..	..	133
Persons aged 65 years or over	..	..	1st Visit	..	..	4,090
Persons aged 65 years or over visited at request of G.P. or hospital	..	..	..	..	..	1,991
Mentally disordered persons	..	..	1st Visit	..	..	86
Mentally disordered persons visited at request of G.P. or hospital	..	..	..	..	..	78
Persons discharged from hospital (excluding Maternity and Mental Hospitals)	..	..	1st Visit	..	..	306
Persons discharged from hospital visited at request of G.P. or hospital	..	..	..	..	..	174
No. of T.B. households visited	..	..	1st Visit	..	..	175
No. of households visited on account of other infectious diseases	..	..	..	..	..	78
Chronic sick under 65 years	..	..	1st Visit	..	..	348
Paediatric cases	..	..	1st Visit	..	..	78
Diabetic cases	..	..	1st Visit	..	..	111
Cardiac cases	..	..	1st Visit	..	..	162
Asthma cases	..	..	1st Visit	..	..	1
Vaccination and Immunisation	..	..	1st Visit	..	..	490
Problem families (Family Planning)	..	..	1st Visit	..	..	516
Families requiring special care	..	..	1st Visit	..	..	455
Handicapped children	..	..	1st Visit	..	..	581
Phenylketonuria tests (Woolf or Guthrie)	..	..	1st Visit	..	..	1,837
No. of hearing screening tests at home	..	..	..	..	..	245
Health Education – visits to groups	..	..	..	..	..	153
Other special enquiries, surveys, etc.	..	..	1st Visit	..	..	2,020
Total number of visits made to pre-school children	..	..	..	..	..	50,458
Total number of visits made to school children	..	..	..	..	..	3,364
Total number of visits made to adults up to 65 years	..	..	..	..	..	5,585
Total number of visits made to persons over 65 years	..	..	..	..	..	11,198
Total	..	..	..	..	..	70,605
Ineffectual visits	..	..	..	..	..	18,988

Domestic Help Service

The service continued to expand during the year and in the estimates for 1970/71 £124,000 was allocated for home help's wages, this compared with £116,363 in 1969/70. A wage award in September 1969, however, added over £7,000 to the wage bill in a full year and thus there was no real increase in the hours of help per week.

During the third quarter of 1970, the number of cases receiving help was 2,720, compared with 2,447 for the same period in 1969. Thus despite strict control over the demands of the service, there has been an increase of 11% in the number of persons receiving help. Although the number of home helps employed during these periods has also increased from 416 to 457 (an increase of 8%) this results from the policy of employing home helps for shorter periods. Consequently, many cases are receiving less number of hours of help per week than in 1969.

Although the staff establishment for the service increased by two Assistant Home Help Organisers and consequently every effort was made during the year to streamline the service, it was found necessary to make provision in the estimates for 1971/72 for an additional 10 full-time home helps at an approximate cost of £8,500 in a full year.

Annual Statistics

Details of the service provided during the year are as follows:—

Number of home helps employed at the end of the year:—

	1970	1969
Whole-time	28	28
Part-time	448	407

Cases for which help was provided:—

	1970	1969
Maternity	38	53
Tuberculosis	4	5
Chronic Sick	335	291
Aged and Infirm	2,730	2,483
Mentally Disordered	7	6
Blind	11	13
Acute Sick	127	91
Miscellaneous	1	—
	<hr/> 3,253	<hr/> 2,942

NURSING EQUIPMENT ON LOAN

This service is under continuous pressure. Figures in brackets are those for the previous year.

	<i>Deliveries</i>	<i>Returns</i>
Air Rings	112 (150)	88 (100)
Bed Rests	356 (410)	112 (302)
Bed Pans	227 (271)	97 (120)
Bed Cradles	154 (108)	59 (43)
Bed Tables	2 (18)	— (14)
Commodes	583 (532)	316 (389)
Invalid Chairs	389 (395)	160 (299)
Walking Sticks	119 (105)	27 (31)
Walking Aids	241 (278)	86 (174)
Fracture boards (sets)	34 (28)	1 (16)
Urinals	66 (110)	2 (3)
Mackintosh sheeting	334 (352)	<i>Non. Ret.</i>
Bath Seats	3 (4)	<i>Nil</i> (2)
Crutches (pairs)	104 (146)	70 (100)

The amount of £1,330 was spent on providing additional equipment during the year, thus making a total of £8,622 since 1966. The income from charges amounted to £196 10s. 6d.

CARE OF THE ELDERLY

By JOHN N. P. HUGHES, M.B., B.Ch., D.P.H.

We have arrived at the stage where the adequacy of provisions for the care of the sick elderly in Cardiff is at a critical phase. It has been recognised for many years that the problems of the geriatric patients were growing rapidly. Increases have been made in many of the services but these have hardly kept pace with the constantly rising demands. The greatest inadequacies exist in provisions, both by the hospital and community services, for the psycho-geriatric cases. It has become very difficult for general practitioners to obtain mental hospital admission even for the most severe cases of elderly mentally ill patients. The less severely affected have unfortunately to be left to deteriorate, often in very unsatisfactory conditions, in their homes. The available community supportive services are inadequate for such cases. When their plight becomes particularly obvious they may find a placement in a hospital geriatric bed intended for the physically ill or else occupy a welfare home situation. In both these instances they are a source of great difficulty as they are unacceptable to the mentally normal patients or residents whose lives they must share and also to the staff who, untrained to deal with their particular needs, may reject them or feel unable to cope correctly with the treatment required.

The consultant psychiatrists concerned with this problem have done their utmost to deal with the psycho-geriatric cases referred to them. Unfortunately the available hospital beds and treatment facilities have been totally overwhelmed by the size of the problem. There are a large number of beds intended for more active essential treatment of the younger mentally ill being occupied by the elderly. This cannot be allowed to extend further and consequently stringent limitations on admissions of old people to mental hospital have understandably been applied.

We await the redistribution of hospital beds which will result from the opening, in the near future, of the new University of Wales Hospital at Heath Park. It is earnestly hoped that this reallocation of hospital facilities in the Cardiff area will take due cognizance of the changing requirements of the community and provide badly needed increases in hospital beds and treatment facilities for the elderly. It is also anxiously anticipated that the opportunity will be taken to provide separate and well defined provisions for certain categories of the younger chronically physically sick who at present must share ward accommodation with the geriatric patient as no other placements are available. This would implement the requirements of the Chronic Sick and Disabled Persons Act 1970.

Community provisions specifically for the elderly mentally infirm are not only inadequate in Cardiff, they simply do not exist. It is in this sector that development of services is urgently required if a preventive approach is to be applied to the problem. The possible opening of a hospital psycho-geriatric assessment unit will only be successful if in addition to long stay hospital backing beds the community provides services to assist in the rehabilitation and integration of these patients in society. Foremost amongst these requirements would be an appropriately staffed Day Centre for the elderly mentally infirm with specialist transport facilities.

The department's provision of district nurses, health visitors, home helps and ambulance provisions largely concerned with the elderly have reached the position of being totally unable to deal with any increases in caseload without increases in personnel. Over the years whilst some increases in staff have been made, a much greater increase in service has been obtained by boosting efficiency. In the case of home helps the operation of a system of split sessions meant that more cases could be given reasonable cover. It is now strongly contended that this stage has passed and that any further stretching of limited resources must be recognised to lead to a vicious circle of deterioration in quality and standards of services rendered.

During 1971 the new Social Services Department will come into existence implementing the recommendations of the Seeborn Committee embodied in the Social Services Act 1970. The members of the Cardiff Public Health Department concerned with work for the elderly are most anxious to continue the co-operation previously enjoyed with the city's Welfare Department over many years. We are determined to make every effort

in the future in avoiding a bipartite approach to the social and health aspects of the problems of the elderly in the city. It is intended that one of our main functions in the future will be to bridge the gap which might develop in this area.

Whilst being aware of the inadequacies of provisions in Cardiff for the elderly, it is important to point out our achievements. A very considerable amount of effort is being made to provide for the requirements of our elderly citizens and in the majority of instances it is sufficient for their needs. Thus there are a large number of elderly people in Cardiff who by means of the supporting services of the Authority, together with the invaluable help of many voluntary agencies, are enabled to continue a happy community existence in their own homes despite failing health and infirmity.

The remainder of this account gives details of the community work with the elderly in Cardiff during 1970. It is hoped that the statistics will be taken as a positive indication of the successful aspects of the efforts made.

Population

The estimated population of people of 65 years and over in the City of Cardiff mid-1970 was 34,930. This was 12.3% of the city's total population and corresponds with the estimated national population figure for this age group. It shows a fall of 230 over the previous year's estimated population of the elderly.

Geriatric Register

An analysis of the index of cases of persons over 65 years of age in the city who were known to be 'at risk' at the end of 1970 is shown below.

				Total	65 - 74 years	75 years and over
Females	..	..	..	4,645	1,168	3,477
Males	..	..	..	1,779	451	1,328
				<hr/>	<hr/>	<hr/>
Persons	..	..	..	6,424	1,619	4,805
				<hr/>	<hr/>	<hr/>

The 6,424 persons form 18.4% of the total of the city's population of persons over 65 years. This is an increase of 13% in numbers on the register during the past year, an actual fall occurred in numbers of cases under 74, but the increase in cases of 75 and over was 30%.

THE PROPORTION OF THE GERIATRIC POPULATION IN RECEIPT OF VARIOUS SERVICES PROVIDED BY THE DEPARTMENT

Home Nursing	3,356 cases during the year received 103,053 visits or 9.6% of population over 65 years (c/f 8.2% in 1969)
Home Help	2,730 cases during the year received regular help or 7.8% of population over 65 years. (c/f 7.1% in 1969 and 5.5% in 1968)
Chiropody	4,551 cases received 20,611 treatments or 13.0% of population over 65 years. (c/f 12.3% in 1969)
Health Visiting	6,081 cases visited during year or 17.4% of population over 65 years. (c/f 16.9% in 1969 and 14.9% in 1968)

The Scheme for the total attachment of the department's Nursing and Health Visiting staff to general practitioners which commenced in 1969 is now becoming more established, and the effect is reflected in the increasing services provided.

Geriatric Liaison Health Visitors

During the year 1,686 new cases were dealt with by the Section, and a total of 4,049 visits were made. Although slightly fewer cases were seen, the increasing complexity of their problems is reflected in the fact that the number of visits remained at the same level. Some 621 of these cases were for social assessment at the request of the Hospital Geriatric Consultant. This shows a two-fold increase over the previous year's figures. 1,258 hospital discharge cases were routinely visited and a further 466 referrals were received from general practitioners and attached practice Health Visitors. Visits to the Hospitals and Day Hospitals amounted to 337. The following table shows the sources of various other visits:—

Visits requested by:—

Medical Officer of Health	..	..	..	..	22
Welfare Officers	..	..	..	..	68
Housing – Welfare or Rent Collectors	..	..	..	..	11
Department of Health and Social Security	..	..	..	..	23
Home Helps	..	..	..	..	48
District Nurses	..	..	..	..	10
Public Health Inspectors	..	..	..	..	6
Women's Royal Voluntary Service	..	..	..	..	17
Relatives	..	..	..	..	71
					—
TOTAL	..	..	..	..	276
					—

Medical Officers working in association with this Section made over 400 visits to patients with particularly difficult problems during the year. Dr. Pat Jenkins joined the staff and is augmenting the efforts of the other doctors concerned with this work.

Area Health Visiting of the Elderly

At the end of the year, some 4,812 cases were in receipt of visits from Area Health Visitors, and received a total of 11,198 visits during the year. There was an increase of 6% over the previous year's total in cases known, and a 23% increase in visits made. This is undoubtedly the reflection of the changing pattern of the Health Visitor's work since attachment to general practitioners.

Geriatric Cases known to Health Visitors

<i>Area</i>					1970
Roath ..	..	..	..	..	720
Gabalfa ..	..	..	..	..	514
Sploott ..	..	..	..	..	255
Grange ..	..	..	..	..	246
Canton ..	..	..	..	..	674
Ely ..	..	..	..	..	578
Llanrumney ..	..	..	..	..	331
College Farm ..	..	..	..	..	251
Fairwater ..	..	..	..	..	315
Llanishen ..	..	..	..	..	188
Butetown ..	..	..	..	..	87
Whitchurch ..	..	..	..	..	125
Rhiwbina ..	..	..	..	..	183
Trowbridge ..	..	..	..	..	315
Llanedeyrn ..	..	..	..	..	30
					—
					4,812
					—

Place of Death

During the year some 1,033 deaths of women over 60 years and men over 65 years occurred at home, out of a total of 2,468 deaths. Thus, 42% of persons in this age group died at home. This is comparable with previous years. The trend of hospitalisation for the terminal event thus appears to continue though a considerable number of those dying in hospital are cared for in the community for part of their last illness.

Geriatrics in the city who died at home	1,010
Geriatrics normally resident in the city who died at the homes of relatives or friends outside the city	23
Geriatrics normally resident in the city who died in the city hospitals	1,128
Geriatrics normally resident in the city who died in hospitals outside the city	301
	<hr/>
	2,462
	<hr/>

Court Orders

A number of cases were referred for compulsory action for removal to hospital or hostel but most responded to intensive persuasion. However, four cases required action by this means under the National Assistance (Amendment) Act, 1951. S.1.

ACTIVITIES OF OTHER DEPARTMENTS AND ORGANISATIONS IN THE CITY CONCERNED WITH THE WELFARE OF THE ELDERLY

City Welfare Department

During the year, two purpose-built Homes for the elderly were opened. One adapted Home was closed having been transferred to the Health Department for use as a Hostel for the mentally ill. Thus at the end of the year some 603 places for elderly persons were provided in 16 Homes. An increase of 51. The Authority supported 664 permanent elderly residents, 85 of these were in Homes provided by voluntary bodies. 25 were in Hostels provided by other authorities, but all financially recompensed by Cardiff City Council. 206 new permanent elderly residents were accepted during the year and a further 206 were taken as short term cases for holiday relief.

Considerable effort is made to increase the number of Meals on Wheels. The aim is to provide a daily meal for a house-bound in need. During the year several areas in the city achieved this target. Priority has also been given to the provision of meals by the Department at Day Centres and Luncheon Clubs. It is felt that the preventive aspects served by the dual purpose of providing nutrition whilst eliminating isolation is very desirable. A purpose-built Day Centre for the elderly was opened in October in Gabalfa Avenue, and a further Luncheon Club commenced operation at the Llanedeyrn Estate in November. A 14% increase in daily meals provided was achieved in comparison with 1969. Once again tribute must be paid to the Women's Royal Voluntary Service for the preparation and distribution of all meals.

					<i>Lunches Served</i>
Day Centres	Butetown (opened 3rd July, 1969)				10,373
	Gabalfa (opened Oct. 1970)	..			2,456
	Swansea Street, Splott	..	..		11,391
	Bangor Street, Roath	..	..		17,613
	Clydach Street, Grange	..	..		18,813
	Wyndham Street, Riverside	..			7,702
	Minehead Road, Llanrumney	..			9,169
	Grand Avenue, Ely	..	..		27,885
	Crwys Road, Cathays	..	..		13,366
	St. Mary's, Whitchurch	..	..		3,171
Luncheon Clubs	St. Hilary, Rumney	..	..		1,580
	All Saints, Llandaff North	..			1,362
	Llanedeyrn (opened Nov. 1970)	..			211
	Rhiwbina	..	..	..	3,672
Meals-on-Wheels	..	..	..	..	38,864
TOTAL					167,628

City Housing Department

Number of one-bedroomed units erected in 1970	..	250
Total of one-bedroomed units (mainly for elderly people) at the end of 1970	.. .. .	3,044

Each of these dwellings erected since 1961 has been provided with background central heating.

Voluntary Community Service

This organisation of groups of young persons continues to contribute many items of service for the elderly in the community not otherwise available. These include decorating, gardening and various odd jobs in addition to voluntary visiting.

Council for Social Service

This body continues to support in many different ways various aspects of work with the elderly in a most excellent fashion.

The efforts of co-ordinating work for the elderly in the city are much appreciated. The Cardiff Council for the Elderly, established in November 1969, under the auspices of the Council for Social Service has completed its first year's work. Special emphasis was placed on the problem of adequate heating for the homes of elderly people during winter and a leaflet was produced in co-operation with the Gas and Electricity Boards. It is anticipated that during the coming year a directory of services of all kinds in the city, devoted to the care of the elderly, will be produced.

CHIROPODY SERVICE

The Department maintained similar arrangements with the panel of chiropodists for the treatment of patients at clinics, surgeries and in their own homes as has previously been described in annual reports. Almost all the patients were of retirement age or over. The waiting list has increased to 898.

Table I	Number of patients registered	..	..	..	..	4,591
	Number of patients on waiting list	..	..	..	..	898
	Number of chiropodists	..	..	..	..	22
	Number of treatments given:					
	at Surgery	..	..	..	13,064	
	at Home	..	..	..	3,561	
	at Clinics	..	..	..	4,221	
					<u>20,846</u>	

Table II

Number of patients registered of retirement age or over	4,551
Number of patients registered as expectant mothers ..	3
Number of patients registered as handicapped persons	37
	<hr/>
	4,591

In addition to the arrangements provided directly by the Department, grants were made to the Women's Royal Voluntary Service to maintain chiropody services at Day Centres for the aged at Grangetown, Riverside, Splott, Llanrumney, Ely and Bangor Street, Roath, Cathays, Whitchurch Luncheon Club.

AMBULANCE SERVICE

A substantial increase in demand on the service is recorded in the statistics for 1970 as shown below. The number of patients showed an increase over 1969 of almost 10,000, i.e. from 120,943 to 130,890, and the mileage increased from 474,298 to 509,278, an increase of nearly 35,000 miles. This is a substantial increase of over 8% in the number of patients carried and almost all the increase is due to the increase in the number of out-patients carried and patients attending day hospitals. The numbers requiring transport to the geriatric day hospital and the several day units at the psychiatric hospital are climbing steadily and are imposing a very heavy demand on this service.

Analysis of Journeys from 1st January to 31st December 1970.

					<i>Journeys</i>	<i>Patients</i>	<i>Miles</i>
(a)	Patient-carrying Journeys:						
	Emergency	..	..	..	12,879	13,253	102,585
	Accident	..	..	..	2,719	3,069	16,138
	Outpatients	..	..	..	35,066	105,534	330,645
	Others	..	..	..	4,187	9,034	48,273
					<hr/>	<hr/>	<hr/>
					54,851	130,890	497,641
(b)	Abortive and Service Journeys					—	11,637
(c)	Transporting of persons other than patients					—	—
		<hr/>	<hr/>	<hr/>
	TOTALS	..	..		57,299	130,890	509,278
					<hr/>	<hr/>	<hr/>
	(Totals for the year 1969)	..	..		(53,516)	(120,943)	(474,298)
	Stretcher cases included in above	..	..			35,856	193,309
	Sitting cases included in above	..	..			95,034	304,332
						<hr/>	<hr/>
						130,890	497,641

Average mileage per journey – 9.07 (1969 – 8.86)

Average mileage per patient – 3.80 (1969 – 3.09)

LLANEDEYRN HEALTH CENTRE

The Llanedeyrn Health Centre opened on 1st September, 1970 on a site in the centre of the estate adjoining the Llanedeyrn Comprehensive School, which was opened at the same time. The main shopping centre is under construction on an adjacent site. The specially designed building was completed at an estimated cost of £82,236, together with £6,700 for site and £20,000 for furniture and equipment. Previously a temporary health centre had been organised from an adapted house situated at the Chapel Wood development on this estate.

The estate is still under development and has at present about 5,000 residents, which will be expanded by the completion of the estate to 12,000, who are drawn from all areas of the city. The Welsh National School of Medicine has joined with the City Council and the Executive Council to establish this as a teaching health centre with the approval of the University Grants Committee, the General Medical Council and the Welsh Office. The Joint Committee of the three participating organisations was set up to formulate the necessary plans.

The doctors practising from the centre work together as a group practice and are appointed as lecturers on the staff of the Welsh National School of Medicine. The Senior Lecturer in charge of the unit provides a link with the Medical School and the Health Centre Committee comprises of representatives of the three participating organisations. The centre will have as its first objective the education of medical students with experience of the principles and practice of medicine outside hospital, but will also provide facilities for postgraduate education research. The activities of the Local Authority Health Services are to be fully integrated in the health centre.

A reception hall leads to a large office and waiting area. Four suites, each comprising a consulting room and an examination room, are provided for general medical practice. The treatment unit, comprising reception area, minor surgery and recovery room, is provided for use by a district nurse, assisted by an enrolled nurse. This accommodation, together with the clinical room and midwives room is available for Local Authority Health Services generally and will be used in conjunction with the consulting room suites. An interview room is provided for health visitors and other social workers. The Centre Superintendent has an office opening off the reception area.

On the first floor a dental suite, intended for both general dental services, the school dental service and the other Local Authority dental services, is provided. It comprises two dental surgeries, an office, waiting area, laboratory, dark room and rest room. It was not possible to commission this suite at the time of opening but it is hoped that the Welsh National School of Medicine, through the University Dental Hospital, will be able to provide a community dental service shortly.

Also on the first floor, accommodation is provided for Welsh National School of Medicine students, comprising a seminar room, a study, an office and two study rooms. A flat is provided for the caretaker and the building includes a pram shelter and one garage. Car parking facilities are available for the staff and a public car park is available for patients close to the building.

PLANNING ON HEALTH CENTRES

At the end of 1970 discussions were being held with the Executive Council regarding the planning of the health centre at Riverside and the conversion of the Fairwater, Grange and Canton Clinics to health centres, but no final agreement had been reached on any of these projects.

HEALTH EDUCATION – 1970

The Health Education Unit continued to be responsible for planning and controlling the issue and use of Health Education material to all sections of the Department and to members of the public. The extent of its activity during 1970 can be seen from the following summary of work.

1. Anti-Smoking

- (a) During the second phase of the intense anti-smoking campaign promoted by the Department of Health and Social Services, visits were made to eight high schools and thirteen junior schools, not covered in the previous year. In addition, the Unit made repeat visits to a further thirty-three junior and eleven high schools. Each visit entailed the showing of one or more films followed by questions and answer sessions. The films 'Smoking and You' and 'One in 20,000' were extensively used during these visits.

(b) **'Five Day Plan' Group Therapy Courses**

Six such courses, with five 'follow-up' sessions, involving thirty-five evening sessions, were held at the Municipal Offices. A total number of 314 enrolments were recorded and of these 217 successfully completed the course. The Health Education Department of the Seventh Day Adventist Church co-operated closely with the Department in the running of these courses, and the Tenovus Cancer Information Centre loaned anti-smoking films to the Department.

2. **Mothercraft and Infant Welfare Classes**

The arrangements for showing suitable films at the mothercraft sessions at the Authority's clinics were maintained. Twenty-one visits were made and the films used included 'To Janet a Son' and 'Their First Years'.

In addition a film provided by the manufacturers of Milton Foods was shown at various clinics throughout the city.

3. **Sex Education and Venereal Disease**

The films 'Learning to Live' (sex education) and 'Quarter Million Teenagers' (venereal disease) were shown at twelve high schools and to various groups and colleges in the city. These films were often followed by a full and frank discussion.

4. **Lectures by Medical Officers and Health Visitors**

Medical Officers gave lectures to students at the Welsh National School of Medicine, Llandaff Technical College, Llandaff College of Education, College of Food Technology and Commerce and to Health Visitors and District Nurses. Lectures were given on such topics as 'Community Care of the Elderly', 'Food Hygiene' and 'Sex Education' as well as the work of the Department. Health Visitors co-operated closely with the medical staff and gave talks in a wide variety of health topics at both schools and colleges.

5. **General Health Education**

The regular programme of film shows suitable for use at old people's centres was continued and during 1970 nineteen visits were made.

The Health Education Unit also visited the Department of Inland Revenue, the British Red Cross Society and Girl Guide Groups to show the film 'Emergency Resuscitation'. The Department's own film 'Your Good Health' was shown to Trainee District Nurses, Student Health Visitors, Ty Gwyn Junior Training Centre and to students pursuing a course in Residential Child Care at the College of Food Technology and Commerce. The film was also shown at many schools in the city. In addition, evening visits to show requested films were made to several Young Wives Clubs, Youth Clubs, Scout Groups and a Public Health Inspector gave illustrated talks to a Mothers Club on hygiene in the home.

Health visitors were shown a film entitled 'The Rubella Breakthrough' made by Smith Kline and French Limited, illustrating the methods of manufacture of 'Cendevac' Rubella vaccine and the effects on the unborn child, when a mother contracts Rubella in early pregnancy.

The Unit's Publicity Assistant has been co-operating with the Council's Town Planning Department at their Centre Plan '70 exhibition and during the year spent 85 sessions at the exhibition – a total of 274 hours.

At Christmas a programme of entertaining films were once again provided for the members of Ty Gwyn Training Junior Centre and Pengam Adult Training Centre.

COUNCIL HOUSING ESTATES AND MEDICAL REHOUSING

One of the most difficult tasks which I face as Medical Officer of Health is the consideration of requests for rehousing or transfer on grounds of ill health supported by medical

certificates. Many of the applications in these categories, together with applications for additional 'points' are manifestly unreasonable and can be readily rejected. In other cases genuine severe illness is present but there is no evidence to show that a change of accommodation will in any way materially improve the patient's circumstances. Particularly problematical is the considerable number of applications for rehousing into centrally heated accommodation received from asthma sufferers. The number is almost equally balanced by asthma patients in a centrally heated environment requesting transfer to open-fire housing. Another difficulty is the large group suffering from 'anxiety state' or 'nervous debility'. Where a family is anxious to move and little progress appears to be being made it is not surprising that individuals in the family reveal signs of strain but it would be quite impossible to accede to all the requests which come forward on these grounds.

Mr. John Moore, the rehousing public health inspector, investigates these applications on my behalf and I then make my recommendations based on reports, the medical certificate and any supplementary evidence available from the medical staff, health visitors, social agencies and other sources.

Mr. Moore is also the local authority's liaison officer with the renal dialysis unit at Cardiff Royal Infirmary and is responsible for making the arrangements for the installation of home dialysis units.

At present Mr. Moore also inspects council houses which become vacant to ensure that they are free from infestation. However pressures from the increasing number of medical rehousing applications and home dialysis units will require the allocation of the vacant house duties to be reviewed.

Before detailing the visits made by the rehousing inspector during 1970 I should mention that Mr. Moore's predecessor Mr. W. Barraby, retired in May 1970 after many years of loyal service to the authority.

During the year the following visits were made by Mr. Barraby and Mr. Moore:—

Vacant houses inspected	..	..	..	..	..	972
Number found verminous	..	..	..	..	..	115
Number requiring disinfecting	..	..	..	..	..	115
Other houses disinfested at request of Estates Department						6
Visits regarding transfers	..	..	..	..	..	580
Visits to council house applicants	..	..	..	..	..	578
Miscellaneous visits	..	..	..	..	..	167
Number of interviews at office	..	..	..	..	..	396
Number of visits in connection with home dialysis	..					52

Consideration was given during the year to a total of 1,357 applicants for rehousing. Of these, 508 were requests for transfers, of which 178 were recommended. The 849 applications for rehousing on medical grounds were dealt with as follows:—

Recommended immediate rehousing	..	..	..	..	102
Awarded medical points	..	..	..	..	170
No action recommended	..	..	..	..	577

Of the 102 recommendations for immediate rehousing 60 were in respect of old age pensioners. This shows a small increase over the previous years.

The medical conditions cited by the 1,337 applicants for priority for rehousing or transfer are broadly classified as follows:—

Pulmonary tuberculosis	..	..	..	..	..	27
Non-pulmonary tuberculosis	..	..	..	..	..	2
Asthma, bronchitis and other chest complaints	..	..	..	..	..	285
Nervous complaints and mental illness	..	..	..	..	..	359
Heart conditions	..	..	..	..	..	168
Rheumatism and arthritic conditions	..	..	..	..	..	121
Skin conditions	..	..	..	..	..	7
Physically handicapped	..	..	..	..	..	56
Other illnesses	..	..	..	..	..	312

Nervous complaints and mental illness again accounted for the largest number of cases, with chest complaints taking a second place. The general pattern of ailments remains as in 1969 with a slight increase in arthritic and skin conditions. 'Other illnesses' include those which could not accurately be placed in any other category. They consist of a wide variety of complaints and occasionally conditions which are not primarily of medical concern.

Home Dialysis

There are at present within the city two council houses in each of which one room has been adapted to receive and treat patients with renal failure. It is anticipated that possibly six patients a year will require home dialysis treatment. Altogether three persons received transplants. To-date one has definitely been rejected whilst in the case of the other two persons it is still uncertain whether or not the transplant has been successful. The two houses converted for use for home renal dialysis have involved the selection of premises with two ground floor living rooms one of which was adequate for conversion and installation of the necessary equipment to carry out the full home renal dialysis treatment. Waterproofed sealed vinyl floors were fitted, additional plumbing and electrical points and lights installed and the walls of the rooms treated in such a manner as to render them easily cleansed and free from dust.

If a patient now residing at one of these properties receives a renal transplant then this house will be maintained for future cases which are expected to arise within the city boundary.

Recent enquiries have been made in respect of two portable units for home renal dialysis, namely a Scan unit and the Portakabin. These units can be used adjacent to privately owned property whereas only council houses have been converted to-date. Comparison of costs of conversion and purchasing of these units is now under consideration.

VII—DENTAL SERVICES

REPORT OF H. V. NEWCOMBE, L.D.S., R.C.S.
Principal School Dental Officer

	As at 31st December 1970	As at 31st December 1969
Full-time permanent officers	7	5
Full-time temporary officers	2	2
Half-time temporary officers	1	1
Part-time temporary officers	5	4
Actual strength in terms of full-time officers ..	11.4	9.2

Personnel

In the year under review there were, as in the previous one, many staff changes to report, these being as follows:—

In May Mrs. R. Hitchings, a recent graduate of the Cardiff Dental School was appointed in a part-time capacity of two sessions per week, subsequently increased to four.

At the end of June Mr. J. James who previously had worked in private practice, joined the staff for a short time on a sessional basis, indicating that he would later apply for a permanent full-time position, which he did, commencing duty in this capacity in September.

Following the June dental graduation results in Cardiff one applicant for a full-time vacancy in the Department was successful, the new dentist Mr. J. Davies taking up his appointment on the 24th August.

In November we sustained a reversal of fortune when Mrs. P. Williams a full-time member of the staff left the Department to take up a more senior position — as Area Dental Officer with another local authority. However, this setback was to some extent alleviated when Mr. J. Turner a part-time officer applied to be taken on full-time. This officer was duly appointed taking up his new post on 1st December.

A week later Mr. C. Thomas who previously held a part-time position as Dental Officer with the London Borough of Barnet took up a similar post with this Authority on a four sessions per week basis.

Absenteeism through sickness resulted in a loss of 146 working hours against a loss of 262 for similar reasons last year.

Statistical results

The increase in dental manpower as indicated in the preceding table, coming mainly as it did in the latter part of the year had for this reason less impact in terms of improved statistical results than otherwise would have been the case. Nevertheless there were more school children inspected and treated and a greater overall volume of dental operations carried out.

The overall number of pupils inspected i.e. the combined total of those inspected at School and Dental Clinics showed an increase of 20.6% over the corresponding figure for last year. Relative to pupils inspected, the number requiring treatment fell by approximately 2.7% which could represent a slight improvement in the dental health situation.

The total number of pupils treated increased by 9.3% but in the 5 – 9, 10 – 14 and 15+ age groups increases were in the order of 13.8%, 3.5% and 9.9% respectively.

Courses of treatment completed rose by 8.5% over that of the previous year's level.

Altogether 1,817 more teeth were filled than last year representing an increase of 13.1%. The ratio of teeth filled to teeth extracted was approximately the same as for last year (viz. 1:1.9).

Figures for prophylactic treatment, teeth otherwise conserved and patients X-rayed rose substantially, these set against the corresponding figures for last year being 5,236 (3,766), 3,580 (2,205) and 423 (320).

In the Orthodontic Section there were two main improvements to record, firstly in the number of cases completed, where out of the total number of cases under treatment 48.1% were completed as compared with 32.9% in the previous year, and secondly a fall of 17.4% in the number of discontinued cases.

It is also gratifying to report a continued reduction in the number of patients supplied with dentures and the number of dentures fitted.

No pupil was supplied with full dentures. On the maternal and child health side, pre-school children's inspections rose by 30.6% and treatment by 28.2%.

As regards treatment there was an overall increase in the number of teeth filled of 4.8% as against a fall of 20.5% in the number of teeth extracted. Ratio of teeth filled to teeth extracted was 1.7:1 as compared with 1.3:1 last year. Also in the current year there were twenty more teeth otherwise conserved per cent of patients treated than in the preceding one.

In the case of expectant and nursing mothers there was an overall increase of 40.4% in the number of inspections carried out, but a decrease of 2.4% in the number treated. On the other hand, there was a substantial improvement in the number of courses of treatment completed to patients treated, represented by an increase of 15%.

There were 17 more mothers supplied with dentures and 33 more dentures fitted.

Dental accommodation

Prior to 1958 dental treatment for school children, pre-school children, expectant and nursing mothers in the Rumney and Llanrumney areas was provided at the Dental Clinic located at Greenway School, Rumney.

In 1958 a health clinic was built at Llanrumney to serve the vast new housing estate, and a modern dental suite was incorporated in the new building. With the dental clinic at Greenway School being subsequently closed down and with few dental practitioners operating in the area it became increasingly evident that the clinic's capacity to meet the increasing dental needs would be insufficient.

A decade later, in 1968, a new Health Centre was opened, on the new Trowbridge Estate, but no dental facilities were provided at that time, although a demand for a dental service clearly existed. However, this situation is now to be remedied, and it is my pleasure to record that the health centre is to be modified to include a new dental suite. The project is already under way and is expected to be completed early next year.

When this is in operation considerable pressure will be taken off Llanrumney Clinic which at present has to cope with the dental requirements of the combined areas of Llanrumney, Rumney and Trowbridge.

Courses, etc. attended by Dental Officers

Mr. J. Lewis, Senior Dental Officer attended a course on Children's Dentistry held at the Institute of Dental Surgery, University of London on 30th November 1970 ending on the 4th December. Mr. Lewis also attended a Seminar earlier in the year at the Cardiff Dental Hospital on the occasion of the visit of Dr. Targe Lothe, Chief Dental Officer of Norway to Cardiff.

It had been intended to show Dr. Lothe around some of our clinics, but he informed us that his very tight schedule made this impossible.

On Friday 4th September we were very pleased to welcome Dr. Kyaw Sein, Lecturer in Preventive and Social Medicine of the University of Rangoon, Burma. He was shown the Bute Town Health Centre and he also visited the clinics at Grange, Splott and Llanrumney, and was most appreciative of being taken around these clinics.

Caries control

The shortage of dental manpower in the School Dental Service generally is such that the workload is in excess of that which the average Dental Officer can undertake to maintain all the patients for whom he is responsible in a permanent state of dental health. In attempting to deal with the problem the Dental Officer is faced with the Hobson's choice of either treating his patients in a random fashion, amounting in effect to little more than providing an emergency service or else to be selective in his choice of patients, dealing only with those with satisfactory attendance records and in such numbers that their full dental requirements can adequately be met, leaving the remainder solely for emergency treatment. In either case the system is unsatisfactory and so a compromise solution is usually sought. It has been shown that certain preventive measures can be effective in the control of dental caries.

In the absence of fluoridation of water supplies which is the method most effective in the long term and one which Cardiff has unfortunately turned down, other methods such as fluoride tablets, fluoride impregnated toothpaste and the topical application of fluoride solution such as stannous or sodium fluoride to the teeth have been tried with varying success. In the latter method it has been demonstrated that given certain conditions reductions of up to 40% in the caries rate can be obtained (Friere 1964, 1966) using the Knutsen technique. Dental hygienists are trained in methods of applying fluoride solutions to the teeth and also in dental health education work and it is evident therefore that they could contribute significantly to the dental work carried out in local health authority clinics. Appointment of such ancillary workers to the staff would therefore seem worthy of consideration. Unfortunately it would appear that dental hygienists are in very short supply – six dental schools at present train between them around eighty hygienists annually.

In my report of last year I referred to the dental hygienist training school incorporated by the Cardiff Dental School with an initial enrolment of five hygienists on a nine month training course. This has now been increased to ten.

Statistics

(a) School Dental Service

	<i>Ages 5 to 9</i>	<i>Ages 10 to 14</i>	<i>Ages 15 and over</i>	<i>Total</i>
Attendances and Treatment				
First Visit	4,357	3,093	562	8,012
Subsequent Visits	7,569	6,582	1,154	15,305
Total Visits	11,926	9,675	1,716	23,317
Additional courses of treatment commenced	608	327	57	992
Fillings in permanent teeth	3,412	7,181	1,671	12,264
Fillings in deciduous teeth	5,149	563	—	5,712
Permanent teeth filled	2,813	6,159	1,451	10,423
Deciduous teeth filled	4,683	507	—	5,190
Permanent teeth extracted	491	1,409	187	2,087
Deciduous teeth extracted	4,965	1,162	—	6,127
General anaesthetics	1,825	660	50	2,535
Emergencies	621	296	49	966
Number of pupils X-rayed .. .. .	..	..	423	
Prophylaxis .. .. .	..	..	5,236	
Teeth otherwise conserved .. .. .	..	..	3,580	
Number of teeth roots filled .. .. .	..	..	111	
Inlays .. .. .	..	..	1	
Crowns .. .. .	..	..	38	
Courses of treatment completed .. .. .	..	..	6,737	

Orthodontics

Cases remaining from previous year	..	..	22
New cases commenced during year	..	..	59
Cases completed during year	..	..	39
Cases discontinued during year	..	..	20
No. of removable appliances fitted	..	..	70
No. of fixed appliances fitted	..	..	—
Pupils referred to Hospital Consultant	..	..	54

Prosthetics	<i>5 to 9</i>	<i>10 to 14</i>	<i>15 and over</i>	<i>Total</i>
Pupils supplied with F.U. or F.L. (first time)	—	—	—	—
Pupils supplied with other dentures (first time)	2	5	4	11
Number of dentures supplied ..	3	5	4	12

Anaesthetics

General anaesthetics administered by Dental Officers —

Inspections

(a)	First inspection at school. No. of pupils	..	10,757
(b)	First inspection at clinic. No. of pupils	..	8,636
	No. of (a) + (b) found to require treatment	..	14,598
	No. of (a) + (b) offered treatment	..	11,840
(c)	Pupils re-inspected at school clinic	..	2,584
	No. of (c) found to require treatment	..	1,685

Sessions

Sessions devoted to treatment	3,543
Sessions devoted to inspection	..	..	324
Sessions devoted to Dental Health Education	..	..	222

(b) Maternal and Child Welfare

	Expectant and Nursing Mothers	Pre-School Children	Total
(a) <i>Attendances and Treatment</i>			
First visits	198	881	1,079
Subsequent visits	536	802	1,338
Total visits	734	1,683	2,417
Additional courses of treatment commenced ..	7	62	69
Number of fillings	375	843	1,218
Teeth filled	314	758	1,072
Teeth extracted	216	436	652
General Anaesthetics given	23	200	223
Emergency visits by patients	25	64	89
Patients X-rayed	14	7	21
Number of scalings	307	640	947
Teeth otherwise conserved	—	345	345
Teeth root filled	5	—	5
Inlays	—	—	—
Crowns	4	—	4
Courses of treatments completed during the year	107	582	689
(b) <i>Dentures Supplied</i>			
Number of patients supplied with full upper or lower	14	—	14
Patients supplied with other dentures	24	—	24
Number of dentures supplied	54	—	54
(c) <i>Anaesthetics</i>			
General Anaesthetics administered by Dental Officers	—	—	—
(d) <i>Inspections</i>			
Number of patients given first inspections during year	246	1,182	1,428
Number of patients in (a) and (d) above who required treatment	235	876	1,111
Number of patients in (b) and (c) above who were offered treatment	235	876	1,111
(e) <i>Sessions</i>			
Number of sessions for treatment	—	—	305
Number of sessions for Health Education	—	—	34

Fluoridation of Public Water Supplies

The Health Committee on the 23rd January, 1970, resolved that the addition of fluoride to water supplies in the city up to 1 part per million be approved and the Waterworks Committee be requested to undertake the necessary arrangements.

The City Council on the 9th March, 1970, upon a notice of motion decided to rescind this decision.

VIII—VACCINATION AND IMMUNISATION

General

The present routine schedule of immunisation against infectious disease, used by this authority, is as follows:—

<i>Age:</i>			
Three months	—	Diphtheria/Tetanus/Pertussis and oral polio	} Primary Course
Four months	—	“ “ “ “ “ “	
Five months	—	“ “ “ “ “ “	
Ten months	—	Measles immunisation	
One to two years	—	Smallpox vaccination	} Boosting doses
Eighteen months	—	Diphtheria/Tetanus/Pertussis and oral polio	
Five to six years	—	Diphtheria/Tetanus and oral polio	
Nine to ten years	—	Oral polio	
Twelve to 13 years	—	B.C.G. immunisation, if necessary	
Thirteen years	—	Rubella Immunisation (Girls)	

Yellow Fever Immunisation

The arrangements with regard to yellow fever immunisation continued and 1,032 persons were immunised and provided with appropriate international certificates. These included 244 seamen immunised on various ships visiting the area.

Vaccination against Smallpox

						<i>By Public Health Dept.</i>	<i>By General Practitioners</i>	<i>Total</i>
PRIMARY VACCINATION								
Under 1 year	..	..	..	..	..	1	16	17
1 to 2 years ..	..	..	..	..	..	1,107	388	1,495
2 to 4 years ..	..	..	..	..	..	87	94	181
5 to 14 years	..	..	..	..	..	23	74	97
15 years and over	..	..	..	..	..	47	72	119
TOTALS						1,265	644	1,909

RE-VACCINATION

Under 1 year	..	..	..	..	..	—	—	—
1 to 2 years ..	..	..	..	..	..	2	—	2
2 to 4 years ..	..	..	..	..	..	7	31	38
5 to 14 years	..	..	..	..	..	29	117	146
15 years and over	..	..	..	..	..	457	1,305	1,762
TOTALS						495	1,453	1,948

34.4% of children between the ages of 1 and 2 years were vaccinated. The Department was responsible for 73.4% of all vaccinations.

Complications of Smallpox Vaccination

During the year, no serious complications of smallpox vaccination were reported.

Combined Immunisation against Diphtheria, Whooping Cough, Tetanus

Primary Triple	Booster Triple	Booster Diphth./Tet.	Booster Diphtheria
3,608 (19 were 5 years or older)	2,615 (222 were 5 years or older)	3,734 (3,678 were 5 years or older)	39 (33 were 5 years or older)

**Primary Immunisation of Children under 5 years
Comparative Figures for the Years 1951-1970**

Year	Infant Welfare and Special Clinics		Mobile Unit		General Practitioner		Total
	Number	%	Number	%	Number	%	
1951	1,806	45.5	1,857	46.7	313	7.8	3,970
1952	1,681	44.5	1,828	48.4	266	7.1	3,775
1953	1,778	46.8	1,741	45.8	282	7.4	3,801
1954	2,866	68.3	1,012	24.2	316	7.5	3,194
1955	2,277	61.2	1,032	27.8	408	11.0	3,717
1956	2,512	61.9	1,146	28.3	400	9.8	4,058
1957	2,295	63.6	891	24.6	427	11.8	3,613
1958	2,492	60.9	1,085	26.5	524	12.6	4,101
1959	2,772	65.7	924	21.9	525	12.4	4,221
1960	2,860	67.7	792	18.8	572	13.5	4,224
1961	3,255	71.3	757	16.6	557	12.2	4,566
1962	3,097	71.1	886	20.3	376	8.6	4,359
1963	3,173	74.4	545	12.8	545	12.8	4,263
1964	3,336	70.1	842	17.7	579	12.2	4,757
1965	2,942	65.8	1,085	24.3	445	9.9	4,472
1966	2,920	67.4	999	23.0	416	9.6	4,335
1967	2,594	59.9	1,033	23.9	699	16.2	4,326
1968	2,735	56.7	757	15.6	1,340	27.7	4,832
1969	2,576	69.0	616	16.5	543	14.5	3,735
1970	2,192	60.3	483	13.3	959	26.4	3,634

Some 82.6% of children born in 1969 have now received a primary course of protection.

The Department continues to co-operate with the manufacturers in studying the various types of antigens which are available.

73.6% of all immunisations were performed by the Department, a reduction of 12% over last year's total, due to increasing participation by general practitioners in this work.

Poliomyelitis Immunisation

Oral vaccine is used exclusively and the table below shows the number of primary courses of immunisation which were administered, as well as the number of booster doses given during 1970.

In view of the age at which immunisation commenced, figures for children born in 1969 might be expected to be virtually complete, and these suggest that some 78.7% of infants born in that year have received a full course of protection.

Year of Birth	ORAL VACCINE		TOTAL
	Complete Course of three doses	Reinforcing dose	Primary Courses and booster doses
1970	1,122	—	1,122
1969	2,253	10	2,263
1968	227	2,027	2,254
1967	39	433	472
1966	97	3,973	4,070
Others	153	3,120	3,273
TOTAL ..	3,891	9,563	13,454

Measles Immunisation

The table shows the number of children immunised during the year.

Immunisation against Measles	
Age	No.
0-1 years	935
1-2 years	870
2-3 years	277
3-4 years	82
4-7 years	179
7-16 years	18
TOTAL	2,361

Some 40.9% of susceptible children born in 1969 have now been immunised against measles.

The Department continued to co-operate with the Medical Research Council in carrying out trials using measles vaccine, until April 1970 when the trials were completed.

Rubella Immunisation

During 1970 the department co-operated with a firm of vaccine manufacturers in further trials using new Rubella Vaccine. The trial carried out in 1969 involving 200 school girls in their third form at high school showed that the vaccine conferred a sufficiently high level of immunity, and all remaining school girls in this age group were immunised in the summer term. Blood samples were taken from 20% of the girls and laboratory examination of these confirmed the previous findings.

Number of school girls immunised during 1970 ..	1,483
Number of school girls immunised during 1969 ..	186
TOTAL ..	1,669

Therefore, 71% of school girls in the 13-14 year age group have to-date been protected against Rubella. Since the immunisation of school girls in this age group will in future be a routine procedure, all absentees will receive their immunisation when the schools are re-visited during 1971.

Tuberculosis

B.C.G. Vaccine continued to be offered to the following groups of tuberculin negative persons:—

- Children aged 12 to 13 years;
- Contacts of known cases of tuberculosis;
- New-born infants at St. David's Hospital;
- Student nurses and other staff working at tuberculosis hospitals.

Showing the Results of Tuberculin Tests carried out during the period 1956–1970 on pupils given B.C.G. twelve months previously

Year B.C.G. given	Number Tuberculin Tested 12 Months Later	Number Tuberculin Positive	% Tuberculin Positive	Number Tuberculin Negative	Number Re-immunised
1956	1,233	1,196	97.0	37	4
1957	1,514	1,533	97.0	41	25
1958	2,111	2,025	95.9	86	47
1959	2,851	2,774	97.3	77	77
1960	2,527	2,401	95.0	126	125
1961	3,206	3,075	95.9	131	118
1962	2,577	2,546	98.8	31	25
1963	3,440	3,188	92.7	252	233
1964	3,391	3,270	96.4	121	88
1965	3,298	3,149	95.7	144	123
1966	671	592	91.1	79	41
1967	1,264	1,239	98.0	25	19
1968	1,742	1,730	99.3	12	9
1969	2,370	2,322	98.0	48	43

Anthrax Immunisation

Immunisation was offered to all workers at risk in abattoirs and knackers' yards in the city.

No. given one dose only	..	..	..	..	13
No. given two doses only	..	..	..	..	19
No. given three doses	..	..	..	..	21
No. given booster dose	..	..	..	..	20
TOTAL	..	..	..	..	73

B.C.G. Immunisation - Cardiff 1960-1970

Year	Number of							
	Contacts Excluding Newborn Babies			School Children			Newborn Babies Immunised	
	Found to be Tuberculin Negative and Immunised with B.C.G.	Found to be Tuberculin Positive	Total	Offered Immunisation	Not * Tuberculin Tested	Tuberculin Positive	Immunised	Contacts
1960	456	50	506	4,862	751	772	3,334	278
1961	569	29	598	5,656	779	678	4,209	361
1962	572	23	595	4,911	1,387	657	2,869	279
1963	403	18	421	5,274	1,212	531	3,351	399
1964	336	23	359	5,053	753	419	3,881	231
1965	399	31	430	5,266	992	342	3,932	183
1966	264	59	323	2,146	567	126	1,453	246
1967	266	65	331	2,035	354	75	1,606	280
1968	224	132	356	5,211	716	925	3,570	216
1969	224	126	350	4,931	571	860	3,047	173
1970	224	184	408	5,258	841	1,079	2,373	129
								924
								1,193
								886
								1,377
								1,421
								1,468
								1,238
								1,284
								1,129
								1,355
								1,236
								219
								208
								221
								89
								244
								356
								105
								123
								116
								101
								87

*Includes absentees and scholars whose parents withheld consent.

**Includes students at Colleges of Further Education.

IX—MENTAL HEALTH SERVICE

L. CLUTTERBUCK, S.R.N., R.M.N., R.M.P.A., M.I.S.W.

Senior Mental Welfare Officer

The number of patients admitted under the Mental Health Act, 1959, from Cardiff in 1970 was:—

(a) Whitchurch Hospital

	<i>Males</i>	<i>Females</i>	<i>Total</i>
Section 5 Informally	527	495	1,022
Section 25 for Observation	—	2	2
Section 26 for compulsory treatment	—	—	—
Section 29 for observation in emergency	61	76	137
Section 60 By Court – Hospital order	5	—	5
Section 71 By Court – Restriction order	1	—	1
Section 72 By Secretary of State – Removal from H.M. Prison	3	—	3
Section 136 Removal to place of safety (By Police)	14	11	25
TOTAL	611	584	1,195

During 1970 there were 215 fewer patients admitted into Whitchurch Hospital than in 1969.

(b) Ely Hospital

Short term care was arranged for two male and four female adult mentally handicapped persons. Arrangements were also made for permanent hospitalisation of 2 males and 1 female.

The reason for these low figures can be attributed to family casework and the greater use being made by parents and relatives of the hostels which are provided by the department.

Care and After-Care – Mental Illness

During the year there were 295 males and 366 females receiving community care. The number of referrals from Whitchurch Hospital and General Practitioners continues to rise steadily.

Elderly Mentally Infirm

The adequate provision of care for the elderly is a problem, as the number of elderly persons needing care increases substantially each year. The elderly people helped by this Department have not only the normal difficulties associated with ageing, but also super-imposed mental disorders. Nevertheless, a number of persons who were referred for initial hospitalisation were successfully supported in the community, the progress of each being reviewed monthly by the hospital consultant concerned.

Alcoholism

Now that some of the stigma has been removed from this illness there is less reluctance on the part of the addicted person to seek help.

During the past year the appointment of a permanent warden at Dyfrig House, Hostel for alcoholics and drug dependants, has increased the services offered to the community. A mental welfare officer visits weekly and there have been encouraging results in the work done at this hostel.

Drug Dependency

The problems of drug addiction have tended in latter years to become associated almost entirely as a problem of the young. This is justified in certain circumstances, although it tends to minimise the case of the older group of the community who become 'addicted' to the more seemingly innocuous drugs to 'help them' through the day.

Both groups need a stable supporting relationship for long periods before they can be successfully withdrawn from these drugs.

During the year the following admissions for hospital treatment were made; Male 36, Female 15, Total 51.

Salvation Army Hostel

This hostel continues to be visited weekly by a mental welfare officer. Due to the continually transient nature of the residents of this hostel, it is difficult to gauge to what extent this service has benefited the individual.

British Red Cross Social Activity Group for the Mentally Ill

Due to difficulties in obtaining satisfactory premises the group was limited to being held only once a week on a Tuesday evening. This was a great disappointment to all concerned. However, towards the end of the year there were encouraging signs that additional premises would be in use by the beginning of 1971. A mental welfare officer attends the social activity groups.

Llandough Hospital

This hospital continues to be visited weekly by a mental welfare officer to interview patients from Cardiff who have been admitted following suicidal attempts. This time consuming service has helped to reduce the number of persons who would have tended, in the past, to have been referred and admitted to Whitchurch Hospital. The number of attempted suicides interviewed were 212 for the year.

Mentally Handicapped

The community care of the mentally handicapped calls for life long supervision and support not only for the individual, but also to give encouragement and understanding help to parents and relatives concerned in caring for persons in this category.

There were 393 males and 397 females (total 790) under friendly supervision at the end of 1970, of these 122 males and 33 females were employed as follows:—

	<i>Males</i>	<i>Females</i>
Labourers	32	—
Road Sweepers	32	—
Laundry Workers	1	5
Porters	10	—
Domestic Workers	—	7
Cafe Workers	—	7
Factory Workers	12	9
Cleaners	—	2
Shopworkers	1	3
Newspaper Roundsmen	2	—
Garage Assistants	2	—
Dustmen	18	—
Gardening Labourers	6	—
Local Merchant Assistants	6	—
TOTALS	122	33

Weekly Out-Patient Clinic for the Mentally Handicapped at St. David's Hospital

This clinic continued under the supervision of Dr. R. Gregg, Deputy Physician, Ely Hospital. A mental welfare officer was present at these interviews with patients and relatives so that both medical and social aspects could be discussed together.

Hostel Accommodation

42 Meteor Street – Male Hostel

This hostel continued successfully into its fourth year with 13 adults in residence, 5 of whom are in full employment. 7 attend Whitchurch Hospital Industrial Training Centre. Short term care was provided for 6 adults during the year. Since the hostel first began, 52 adults have availed themselves of the hostel services. The routine running and supervision of the hostel is administered by the resident housekeeper and her husband who have continued to give understanding and sympathetic help and guidance to the residents.

139 Splott Road (Group Home – Male Residents)

There are 8 adult clients accommodated at this home, 2 are in full employment, 4 attend Whitchurch Hospital Industrial Therapy Unit daily and 1 attends the Adult Pengam Training Centre. These 8 men all need supportive care. A mental welfare officer is given free accommodation for supervision of the residents.

34 Claude Road (Group Home – Female Residents)

There are 9 adults at this home which continues to function very satisfactorily with the minimum of supervision by the mental welfare staff. This home has operated successfully for 7 years.

48 Shirley Road (Group Home – Female Residents)

This group home opened during October and at the present time there are 4 adults resident. This number can be increased to 8. A female mental welfare officer is given free accommodation in return for supervision of these residents.

Ty Gwyn Hostel (Female Adults and Children)

This hostel accommodates 21 female adult residents and has been fully occupied throughout the year by long stay and short term care residents. Short term care was provided for 18 persons during the year to relieve aged parents and allow others to arrange holidays for members of the family.

Children's Section

This section has functioned satisfactorily for short term care, Monday to Friday, during term time and throughout holiday periods.

Permanent accommodation was given to three children, one of whom had been in hospital for a number of years.

Cardiff Health Hostel – 75 Cardiff Road (Female Residents)

This property was appropriated from the Welfare Department at the end of October. Due to the difficulties in obtaining a suitable house-keeper residents were not moved in until the new year.

**Number of Mentally Handicapped and Severely Mentally Handicapped
Adults and Children receiving training at Local Health Authority Training
Centres as at 31st December, 1970**

	Under 16 years			Over 16 years		
	M	F	Total	M	F	Total
(A) PENGAM ROAD ADULT CENTRE						
(a) Occupation Centre	—	—	—	28	29	57
(b) Training Centre	—	—	—	33	27	60
TOTAL (A)	—	—	—	61	56	117
(B) TY GWYN JUNIOR CENTRE						
TY GWYN ROAD						
(a) Nursery (Group I)	8	5	13	—	—	—
(b) Nursery (Group II)	10	5	15	—	—	—
(c) Intermediate Group	4	7	11	—	—	—
(d) Junior Groups	11	18	29	—	—	—
(e) Senior Groups	21	16	37	—	—	—
(f) Special Care Unit	11	14	25	—	—	—
(g) Special Group	4	7	11	—	—	—
TOTAL (B)	69	72	141	—	—	—
TOTAL (A) AND (B)	69	72	141	61	56	117

**Cases referred to Mental Welfare Officers during the year ended
31st December, 1970**

	Under 16 years		16 years and over		Total
	M.	F.	M.	F.	
ADMITTED TO HOSPITAL					
UNDER ORDER					
Mentally Ill	—	—	49	79	128
Mentally Handicapped	—	—	—	—	—
Severely Mentally Handicapped ..	—	—	—	—	—
TOTALS	—	—	49	79	128
ADMITTED TO HOSPITAL					
INFORMAL					
Mentally Ill	—	—	21	16	37
Mentally Handicapped	—	—	—	—	—
Severely Mentally Handicapped ..	—	—	—	—	—
TOTALS	—	—	21	16	37
TEMPORARY RESIDENTIAL CARE					
Mentally Ill	—	—	—	3	3
Mentally Handicapped	—	—	3	6	9
Severely Mentally Handicapped	23	17	3	12	55
Mentally Handicapped	—	2	2	4	8
Severely Mentally Handicapped	—	—	—	—	—
TOTALS	23	19	8	25	75
COMMUNITY CARE					
Mentally Ill	1	1	292	259	553
Mentally Handicapped	—	3	5	16	24
Severely Mentally Handicapped ..	—	—	—	2	2
TOTALS	1	4	297	277	579
GRAND TOTAL	24	23	375	397	819

Provision made for Patients' Care during 1970

	Mentally Ill				Mentally Handicapped				Severely Mentally Handicapped				Total				Grand Total
	Under 16 years		16 years and over		Under 16 years		16 years and over		Under 16 years		16 years and over		Under 16 years		16 years and over		
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F	
1. Number of patients under Local Health Authority care at 31.12.70																	
(a) Under Guardianship	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(b) Attending Training Centres	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
(c) Receiving home visits but not included (a) and (b)	—	—	315	380	—	—	191	175	6	6	64	96	6	6	570	651	1,233
Totals	—	—	315	380	12	8	203	189	65	68	113	138	77	76	631	707	1,491
2. Number of patients on Waiting List for admission to Hospital at 31.12.70																	
(a) In urgent need of hospital care (elderly people)	—	—	7	4	—	—	—	—	—	—	—	—	—	—	7	4	11
(b) Not in urgent need of hospital care	—	—	25	47	—	—	—	—	—	—	3	8	—	—	28	55	83
Totals	—	—	32	51	—	—	—	—	—	—	3	8	—	—	35	59	94
3. Number of Admissions for temporary residential care during 1970																	
To N.H.S. Hospitals	—	—	—	—	—	—	—	—	—	—	2	4	—	2	2	4	8
To L.A. Hostels	—	—	—	3	—	—	3	6	23	17	3	12	23	17	6	21	67

Patients referred to Local Health Authority during year ended 31st December, 1970

Referred by	Mentally III				Mentally Handicapped				Severely Mentally Handicapped				Total				Grand Total	
	Under 16 years		16 years and over		Under 16 years		16 years and over		Under 16 years		16 years and over		Under 16 years		16 years and over			
	M	F	M	F	M	F	M	F	M	F	M	F	M	F	M	F		
General Practitioners	—	1	70	89	—	1	1	2	—	—	—	—	—	—	2	71	91	164
Hospitals, on discharge from in-patient treatment	—	—	148	160	—	1	1	5	—	—	—	—	—	—	1	149	165	315
Hospitals, after or during out-patient or day treatment	—	—	23	25	—	—	1	1	—	—	—	—	—	—	—	24	26	50
Local Education Authorities	—	—	1	—	—	—	1	3	—	—	—	2	—	—	—	2	5	7
Police and Courts	—	—	9	4	—	—	—	2	—	—	—	—	—	—	—	9	6	15
Other Sources	1	—	80	39	—	1	1	3	—	—	—	—	—	1	1	81	42	125
Total	1	1	331	317	—	3	5	16	—	—	—	—	2	—	4	336	335	676

**Mentally Handicapped Patients resident in Hospital
and Homes at December, 1970**

HOSPITAL	Mentally Handicapped				Severely Mentally Handicapped			
	Under 16 years		16 years and over		Under 16 years		16 years and over	
	M.	F.	M.	F.	M.	F.	M.	F.
Brynhyfryd	—	—	3	—	—	—	1	1
Darenth Park, Kent	—	—	—	1	—	—	—	—
Ely, Cardiff	—	—	55	52	12	10	90	48
Garth Angharad	—	—	2	—	—	—	—	—
Hensol Castle	—	—	11	6	—	—	2	19
Hortham Brentry	—	—	1	1	—	—	—	—
Llanfrechfa	2	—	2	2	3	—	5	—
Little Plumstead, Norfolk	—	—	—	1	—	—	—	—
Llys Maldwyn	—	—	—	—	—	—	3	—
Oakwood Park	—	—	3	—	—	—	2	—
Rampton	—	—	4	—	—	—	—	1
Stallington Hall	—	—	1	—	—	—	—	—
Stoke Park, Bristol	—	—	1	4	—	—	5	1
Whitchurch, Cardiff	—	—	2	6	—	—	2	2
REGISTERED HOMES								
Cheshire Home, Radyr	—	—	—	1	—	—	—	—
Etloe House, Leyton	—	—	—	—	—	—	—	4
Ladymead House, Bath	—	—	—	1	—	—	—	—
St. Elizabeth School and Home, Much Hadham, Herts.	—	—	—	1	—	—	—	—
St. Joseph's Home, The Croft, Sudbury	—	—	—	1	—	—	—	—
Totterdown Hall, Weston	—	—	—	1	—	—	—	—
TOTALS	2	—	85	78	15	10	110	76

TRAINING CENTRES

Ty Gwyn Junior Training Centre

There are 141 children under sixteen years of age attending this centre who are being cared for and trained by a very efficient staff. Within the centre further adaptations were carried out to provide extra facilities in order to re-organise the special care unit and expand the accommodation to provide for 36 doubly handicapped children.

All children attending the centre were medically examined and assessed by a Senior Medical Officer during the year. The centre was visited weekly by a number of students in training for the Diploma Course for Teachers of the Mentally Handicapped, by various groups interested in Child Health and student nurses.

Adult Training Centre and Workshops, Pengam

A sectional building has been erected at this centre to provide accommodation for fifty trainees. This will relieve overcrowding in the main building and provide additional toilet and cloakroom facilities along with office accommodation for the manager who was appointed in October.

The staff establishment has been increased from six to nine and all posts have been filled. During the coming year a comprehensive programme to cover social training and contract work is to be introduced at the centre to provide both a stimulant and sheltered employment for the adult trainee.

The programme of development, adaptation and renovation to this centre continues and plans are well advanced for the erection of a separate dining hall, internal building work and decoration within the main stone built building.

SCHOOL HEALTH SERVICE

I—MEDICAL INSPECTION

The average numbers of school children and the average attendances for the year ended December 1970 were as follows:—

	Average Number on Registers	Average Attendance
High Schools (11–18 years)	13,584	12,191
High Schools (11–16 years)	7,448	6,395
Primary and All-Age Schools	28,781	26,406
Special Schools	479	382
TOTAL	50,292	45,374

The following table shows the number of school children inspected at periodic medical inspections at schools, their physical condition and the numbers of individual children found to require treatment (excluding dental diseases and infestation with vermin) during 1970. (Column 5 shows the number of pupils who have been considered for selective medical examination and were found not to warrant a medical examination).

Age Groups inspected (By year of Birth)	No. of Pupils who have received a full medical exam- ination	PHYSICAL CONDITION OF PUPILS INSPECTED		No. of Pupils found not to warrant a medical exam- ination (See Note I above)	Pupils found to require treatment (excluding dental diseases and infestation with vermin)		
		Satisfactory	Un- satisfactory		For defective vision (excluding squint)	For any other condition recorded at Part II	Total individual pupils
		No.	No.				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1966 and later	576	576	—	—	7	121	123
1965	627	627	—	—	35	44	74
1964	3,480	3,480	—	—	252	618	752
1963	692	692	—	—	63	123	158
1962	53	53	—	—	5	6	10
1961	17	17	—	—	2	3	5
1960	383	383	—	2,194	31	80	99
1959	750	750	—	925	58	203	225
1958	306	305	1	80	26	78	88
1957	8	8	—	—	—	—	—
1956	1,422	1,422	—	—	134	194	304
1955 and earlier	2,977	2,976	1	—	189	235	387
TOTAL	11,291	11,289	2	3,199	802	1,705	2,225

The number of schools specially inspected and the numbers of re-inspections undertaken were as follows:—

						Boys	Girls	Total
Special Inspections	..	At School Clinic	..	..		1,309	1,285	2,594
Re-inspections	..	At School	..	..	..	430	308	738
		At School Clinic	..	..		606	589	1,195
TOTAL						1,036	897	1,933

Defects found by periodic and special medical inspections during the year. The table shows the number of pupils requiring treatment (T) and the number of pupils requiring observation (O).

DEFECT OR DISEASE						PERIODIC INSPECTIONS				Special Inspections
						Entrants	Leavers	Others	Total	
SKIN	..	..	..	..	T	66	139	21	226	1,879
					O	30	5	4	39	2
EYES (a) Vision	..	..	..	..	T	357	323	122	802	9
					O	134	25	3	162	—
(b) Squint	..	..	..	..	T	46	31	22	99	1
					O	9	1	6	16	—
(c) Other	..	..	..	..	T	8	7	1	16	—
					O	8	3	1	12	—
EARS (a) Hearing	..	..	..	..	T	109	73	35	217	8
					O	34	6	4	44	5
(b) Otitis Media	..	..	..	..	T	26	31	5	62	3
					O	14	6	—	20	—
(c) Other	..	..	..	..	T	23	13	1	37	1
					O	14	1	1	16	—
NOSE AND THROAT	..	..	..	..	T	203	138	35	276	87
					O	202	65	35	302	3
SPEECH	..	..	..	..	T	63	11	19	93	4
					O	46	3	30	79	—
LYMPHATIC GLANDS	..	..	..	..	T	35	8	3	46	2
					O	95	8	23	126	—
HEART	..	..	..	..	T	9	9	1	19	19
					O	63	24	24	111	5
LUNGS	..	..	..	..	T	7	10	4	21	12
					O	29	12	14	55	4
DEVELOPMENTAL (a) Hernia	..	..	..	..	T	5	4	1	10	1
					O	13	1	4	18	—
(b) Other	..	..	..	..	T	13	30	2	45	45
					O	153	21	40	214	12
ORTHOPAEDIC (a) Posture	..	..	..	..	T	23	55	12	90	10
					O	7	3	1	11	3
(b) Feet	..	..	..	..	T	163	121	34	318	30
					O	71	19	13	103	1
(c) Other	..	..	..	..	T	46	48	32	126	24
					O	33	14	91	138	3
NERVOUS SYSTEM (a) Epilepsy	..	..	..	..	T	—	2	—	2	2
					O	1	2	—	3	—
(b) Other	..	..	..	..	T	4	6	—	10	7
					O	5	2	—	7	1
PSYCHOLOGICAL (a) Development	..	..	..	..	T	4	3	2	9	7
					O	8	4	4	16	—
(b) Stability	..	..	..	..	T	23	25	—	48	5
					O	9	9	5	23	—
ABDOMEN	..	..	..	..	T	1	3	—	4	5
					O	11	7	3	21	1
OTHER	..	..	..	..	T	59	54	13	126	269
					O	26	24	6	56	101

II—‘FOLLOWING UP’ AND THE WORK OF HEALTH VISITORS AND NURSES

A summary of the work of the health visitors in connection with home visiting is given in the following table:—

Visits for	Total
Defects of vision	175
Defects of ear, nose and throat	75
Other defects and diseases	958
Scabies	354
Nursery School pupils	175
TOTAL	1,737

The following is a summary of work done by the visitors and nurses in connection with uncleanliness during the year:—

Number of:

Examinations of children for uncleanliness	99,650
Children found with vermin and/or nits	2,303
Children for whom cleansing notices issued	2,094

Health Visitors paid 809 routine and 323 special visits to schools to inspect and follow-up children reported to require treatment.

Vision Testing of Pupils in Junior Schools

In addition to periodic medical inspections, arrangements have been made for the annual vision testing of pupils who are in their last two years in the Junior Schools.

The number of children tested was 7,476 and the number found to have a vision defect requiring further investigation at the clinic was 594.

III—TREATMENT

Particulars of the treatment of minor ailments, defective vision and squint, external eye diseases, defects of ear, nose and throat, of orthopaedic and postural defects, etc., are given in the following tables:—

(a) Minor Ailments

DISEASE OR DEFECT	Number of defects treated or under treatment during the year under the Authority's Scheme	Total number of attendances at Clinics
Scabies	688	
Impetigo	41	
Other Skin Diseases	1,876	
Minor Ear Defects	74	
Miscellaneous (e.g. minor injuries, bruises, sores, chilblains, etc.)	482	
TOTAL	3,161	7,339

(b) Defective Vision and Squint

Particulars of the work of the Ophthalmic Clinics during the year are given below:—

Number of children examined	3,980
Errors of refraction	1,970
*Spectacles prescribed	1,623
Other defects or diseases treated	299
Referred to Orthoptic Clinic	110
Attendances at Clinics	6,198

*There was no change in the prescription in 49 refractions.

(c) Defects of Ear, Nose and Throat

	EAR	NOSE AND THROAT	
		Tonsils and Adenoids	Other Defects
Received operative treatment	149	592	92
Received other forms of treatment	35	116	
Total number of children examined	390	1,185	
Attendances at Clinics	592	1,622	

Waiting List for Operative Treatment at 31st December, 1970

Tonsils and Adenoids	313
------------------------------	-----

Hearing aids were provided for 8 children during 1970 and 92 children previously equipped were also using aids.

(d) Orthopaedic and Postural Defects

Children requiring treatment for orthopaedic and postural defects are referred to the Orthopaedic Clinic which is now maintained by the Cardiff Hospital Management Committee at specially adapted premises in an annexe to the Children's E.N.T. Hospital at Ely.

Details of the treatment provided were included in previous reports when this Clinic was part of the administration of the School Health Service. It can be reported, however, that 1,068 pupils were examined and treated at the Clinic during the year.

(e) Cleansing

(a) *Cleansing of children with unclean heads.*—It will be noted that the report of the work of the Health Visitors refers to the cleansing inspections which are undertaken each term in schools. Continual infestation of certain pupils is common in a number of families and it is also noted that certain schools show a considerably higher incidence than others. Every effort is made to ensure that children whose heads are unclean are cleansed at home by the parents. A small proportion for various reasons remain unclean in spite of advice given to parents and such children are sent for cleansing at the Treatment Centre. If this opportunity is not taken by the parents the Authority may proceed against them in the Court under the provisions of the Education Act of 1944. During the year 417 children attended the school clinic or centre for such cleansing.

(b) *Treatment of Scabies.*—Whilst scabies is no longer a problem of the same dimensions as was encountered during the war years, measures are necessary to secure effective treatment of the smaller number of persons who become infected. The Department's Treatment Centre, which is staffed as required by clinic helpers is available for the treatment of adults and children.

A summary of the work of the centre during the year is as follows:—

Number of cases treated:

Vermin and nits in head	..	..	..	..	..	417
Impetigo of head, face and hands	..	..	..	..	..	104
Cleansing baths only	..	..	..	..	..	6
Scabies baths (children)	..	..	..	..	..	688
Scabies baths (adults)	..	..	..	..	..	109
TOTAL	..	..	..	..	..	1,324

Attendances for Scabies:

School children	..	..	..	..	..	1,393
Children under school age	..	..	..	..	..	59
Adults	..	..	..	..	..	214
TOTAL	..	..	..	..	..	1,666

IV—HANDICAPPED PUPILS

The numbers of handicapped pupils known to the Department at 31st December, 1970 are shown in the following table:—

BLIND CHILDREN

At Residential Special Schools	..	..	..	6
TOTAL	..	..		6

PARTIALLY SIGHTED CHILDREN

At Residential School	..	..	..	4
At Special Classes for the Partially Sighted	..			10
TOTAL	..	..		14

DEAF CHILDREN

At Residential Schools	..	..	..	10
At Special Day Schools	..	..	..	10
Awaiting admission to Special Day School	..			1
TOTAL	..	..		21

PARTIALLY HEARING CHILDREN

At Special Class	..	..	..	..	26
At Maintained Schools (day)	..	..	..		96
TOTAL	..	..			122

DELICATE CHILDREN (Children who by reason of impaired physical condition cannot without risk to their health be educated under the normal regime of an ordinary school).

At Special Day Schools	..	..	..	..	28
TOTAL	..	..			28

PHYSICALLY HANDICAPPED CHILDREN

At Residential Special Schools	..	..	..	2
At Special Day Schools	..	..	..	52
Awaiting admission to Special Day School	..			—
TOTAL	..	..		54

Children attending Preswylfa Nursery and Assessment Unit	27
--	----	----	----	----	----	----

Children with Communicating difficulties attending a Special Class	9
--	----	----	----	----	----	---

EDUCATIONALLY SUBNORMAL CHILDREN

At Special Day Schools	..	..	..	..	398
At Special Classes	..	..	..	..	210
At Residential School	..	..	..	..	3
At Presswood House Diagnostic Unit	..	..			25
At Independent School	..	..	..	..	5
At Maintained Schools awaiting admission to Special Schools	..	..	..	..	54
Awaiting admission to Residential Special School					4
TOTAL					699

MALADJUSTED CHILDREN

At Special Class	..	..	..	..	15
At Residential Schools	..	..	..	..	1
At Independent Schools	..	..	..	..	5
At Boarding Home	..	..	..	..	2
Awaiting admission to Special Class	..	..			1
Awaiting admission to Residential School				..	8
TOTAL					32

During the year 302 children who had been reported as being handicapped pupils were specially medically examined, with the following results:—

Educationally subnormal and suitable for education in a special day school or special class	..	..	..	..	..	127
Educationally subnormal and suitable for education at Presswood House Diagnostic Unit	..	..	..	..	..	17
Children recommended to remain in ordinary school	..	..				40
(18 of these children were examined and recommended for special educational treatment in ordinary school by the Educational Psychologist. Special medical examination was not considered necessary in these cases).						
Children deferred for further special medical examination	..	..				19
Children recommended for admission to a Nursery School	..					2
Pupils of Presswood House Diagnostic Unit:						
Transferred to Special Schools or Classes for educationally subnormal pupils	..	..	..	..	..	11
Transferred to Greenhill Open Air School..	..	..	..			1
Pupils of Gabalfa Special School for Educationally Subnormal Children:						
Granted permission to leave before attaining the age of 16 years						17

Pupils of Woodlands Special School for Educationally Subnormal Children:

Granted permission to leave before attaining the age of 16 years	17
Children transferred to the care of the Local Health Authority ..	1
Children transferred informally to training centre	17
Blind – for admission to a Residential Special School	1
Deaf – for admission to a Residential Special School or Day School	2
Partially Sighted – for admission to Special Class	—
Partially Hearing – for admission to Special Class	5
Physically Handicapped – for admission to a Special Day School	1
Maladjusted – for admission to a Residential Hostel or Special School or Class	16
Recommended for Home Teaching	8

Greenhill Open-Air School

In addition to the above examinations, 11 children were found to be delicate pupils and recommended for admission to the Greenhill Open-Air School. Eleven children were admitted to the school and 14 were discharged.

Cerebral Palsy Unit

The Physiotherapists administered a total of 2,029 treatments during the year, of which 1,117 were treatments at the Cerebral Palsy Unit. 298 home visits were also made in response to parents' requests for children to have continued treatment in their homes during school holiday periods.

The following table shows the number of physiotherapy treatments administered during the year:—

MONTH	Spastics	Miscellaneous Cases	Asthma	Plaster	Total	Number of times pupils used the swimming pool
January	92	62	8	—	162	55
February	122	71	8	1	202	73
March	126	72	8	2	208	64
April	106	70	12	1	189	97
May	104	96	4	—	204	59
June	101	74	7	3	185	—
July	67	50	3	1	121	—
August	22	12	—	1	35	—
September	100	71	6	1	178	52
October	88	74	8	2	172	72
November	119	80	10	—	209	44
December	88	64	12	—	164	72
TOTAL	1,135	796	86	12	2,029	588

SPEECH THERAPY

Miss B. M. R. MORRIS, Senior Speech Therapist writes:

The situation as regards the Speech Therapy Department has worsened in 1970. At the commencement of the year the staff consisted of Miss M. Morris (Senior), Miss M. P. Francis and Miss J. R. Davies, full time, and Mrs. M. L. Clarke (two sessions). This comprised a total of 32 sessions per week, seven of which were being undertaken in special schools.

Miss J. R. Davies resigned at the end of August to take up a post in Gloucester.

Our advertisements for the past two years have failed to attract a single applicant. The figures reveal that there are at least 200 children awaiting examination or treatment. The numbers being dealt with at the end of the year were 201.

Five clinics are now closed in addition to most of the special schools. An enquiry into the profession is now being held by the Department of Education and Science. It is hoped that great improvements will result from this.

There is also continual talk of a speech therapy training school opening in Cardiff. Until these events take place, I see no hope for the profession in Wales.

The statistics relating to the work for the year show the number of children treated at 241. New cases admitted were 171 and the number of children discharged was 186. In addition, 102 children were being kept under observation and 253 were awaiting appointments at the end of December 1970. The speech therapists made 117 visits to schools and to the homes of children during the year.

Special Class for Children with Disorders of Speech and Language at Allensbank Infants School

This was opened in September 1970 and by December 1970, eight children had been admitted. Four were from Infants' Schools, three from E.S.N. Schools, where they were wrongly placed, and one from the Nursery Assessment Unit at Preswylfa. The staff consists of a teacher who has had no specialised training; but has a keen interest and has visited many of the specialised units; with a teacher's aide.

The Unit is one classroom opening off the hall of an infants school. Regular visits are paid by the Educational Psychologist and School Medical Officer, and visits on demand from the Psychiatrist. It is hoped to set up a regular Group Meeting next year to discuss problems as they arise. Unfortunately, when the class was opened, no speech therapist was available for regular sessions at the School, but efforts are being made to remedy this.

Age of Children

Four are already of junior school age and three will be seven by Easter 1971 so that consideration needs to be given to the establishment of a class in the junior school.

Degree and type of handicap

Four children had expressive difficulties and are already sufficiently improved to be taking some lessons with the ordinary school classes. Their prospects for an early return to ordinary school are good. Two of them have expressive difficulties complicated by a past history of middle ear disease and emotional problems and their progress has been slower. The other two children have severe receptive difficulties and their prospects for integration in normal classes appears remote. Both had 'autistic' features at an earlier stage, but have never shown the full classical picture of infantile autism. They are likely to present a continuing problem throughout their school life.

Progress

All the children appear to have benefited from the transfer to a class geared for their special handicaps, but this is particularly so in the younger age group who have not yet become emotionally disturbed by their difficulties. The need for recognition, assessment,

treatment and counselling at an early stage has been brought home by this initial review of the first term of an experimental form of special education, and the next step must be an examination of the means to implement this.

AUDIOLOGY

by J. N. P. HUGHES, M.B., B.Ch., D.P.H.

The previously established pattern of case-finding work has continued. Health visitors during the year referred some 80 babies they suspected to have impairment of hearing. Of these no fewer than 5 were found to be new cases of perceptive hearing loss. This continues the previous year's findings of a high incidence of significant deafness revealed in children at under 18 months and indicates the success of the Health Visitors in their screening work with infants. Again this year there were no common aetiological factors found.

TABLE I
Audiometric Screening Sessions at Schools

	1965	1966	1967	1968	1969	1970
Number of sessions	34	88	97	105	92	130
Number of children tested	1,288	2,786	3,473	3,350	2,398	4,037
Number found satisfactory ..	1,028 (80%)	2,297 (82%)	3,158 (91%)	3,111 (93%)	2,193 (91%)	3,567 (88%)
Number referred for further assessment ..	261 (20%)	487 (18%)	315 (9%)	239 (7%)	205 (9%)	470 (12%)

Audiometric screening of school entrants (using a 25 decibel screening level) has continued and more work has been possible during the year due to increase in staff by the employment on a part-time basis of a further audiometrician S.R.N. School Nurse. 4,037 school entrants were screened and 88% were found to be satisfactory. 12% were referred for further assessment at the Authority's own clinics and the significant cases then were seen at the Audiology Unit at the Children's E.N.T. Hospital. The Department continued to liaise with the hospital Audiology Unit and a weekly joint clinic is held at which the peripatetic teachers of the deaf children in the city are also present.

The partial hearing units attached to ordinary schools in the city (nursery – infants – junior at Coed Glas School, Llanishen and senior at Llanedeyrn High School) were each visited by a doctor and an audiometrician once a term throughout the year to ensure that the needs of the partial hearing children were fully catered for and to avoid the necessity of an unnecessary loss of school time.

TABLE II
Hearing Assessment Clinic Sessions

	1965	1966	1967	1968	1969	1970
Number of sessions	35	88	95	111	129	129
Number of children sent for	365	1,207	1,336	1,569	1,822	1,826
Number attended	262	804	913	969	1,201	1,265
Number found to have satisfactory hearing ..	104 (40%)	442 (55%)	476 (52%)	359 (37%)	395 (33%)	340 (27%)
Number referred for further treatment ..	158 (60%)	362 (45%)	437 (48%)	610 (63%)	806 (67%)	925 (73%)

TABLE III SEVERELY DEAF CHILDREN OF SCHOOL AND PRE-SCHOOL AGE IN THE CITY

	1965	1966	1967	1968	1969		1970											
							Age Groups - Years											
							Under 4	4-5	6-7	8-9	10-11	12-13	14-15	15+	Total			
1. Diagnosed and attending Special Schools																		
(a) Llandrindod Wells Residential School	6	6	5	6	5	Boys Girls	— —	— —	— —	— 1	2 —	— 1	— 1	— —	— 1	— —	2 4	6
(b) Other Residential Schools	2	3	2	2	3	Boys Girls	— —	— —	— 1	— —	— —	1 —	1 —	— —	2 —	— —	4 1	5
(c) Whitchurch Nursery School for the Deaf	6	4	4	5	7	Boys Girls	2 2	2 2	— 1	1 1	— —	— —	— —	— —	— —	— —	5 6	11
(d) Pre-school receiving home teaching by peripatetic teacher	2	5	3	3	6	Boys Girls	3 2	— —	— —	— —	— —	— —	— —	— —	— —	— —	3 2	5
2. Children attending Training Centre who are severely deaf	4	2	2	2	2	Boys Girls	— —	— —	— —	— —	— —	— 1	— —	— —	— —	— —	— 1	1
TOTAL	20	20	16	18	23	Boys Girls	5 4	2 2	— 1	1 3	2 —	1 2	1 1	2 1	— —	14 14	28	

TABLE IV PARTIAL HEARING SCHOOL AND PRE-SCHOOL CHILDREN KNOWN IN THE CITY

	1965	1966	1967	1968	1969		1970									Total
							Age Groups - Years									
							Under 4	4-5	6-7	8-9	10-11	12-13	14-15	15+		
Total All Ages						Boys Girls	2 —	2 —	3 3	2 3	3 1	1 5	— 1	— —	13 13 } 26	
(a) Attending Cardiff partial hearing units	5	10	15	14	18	Boys Girls	2 —	2 —	3 3	2 3	3 1	1 5	— 1	— —	13 13 } 26	
(b) Attending other partial hearing units (Glamorgan)	—	3	4	4	3	Boys Girls	— —	— —	— —	— —	— —	— —	— —	— —	— — }	
(c) Attending various special schools for physically handicapped and E.S.N. pupils, etc.	6	9	10	9	9	Boys Girls	— —	— —	1 —	3 1	— 3	— 1	1 1	1 —	6 6 } 12	
(d) Children with hearing aids attending ordinary schools	40	59	81	100	83	Boys Girls	— —	1 2	6 5	7 10	9 10	8 8	6 5	3 5	40 45 } 85	
(e) Pre-school children under observation	8	15	10	3	6	Boys Girls	2 5	— —	— —	— —	— —	— —	— —	— —	2 5 } 7	
(f) Attending Preswylfa Assessment Unit	—	—	—	3	2	Boys Girls	— —	1 —	— —	— —	— —	— —	— —	— —	1 — } 1	
(g) Partial hearing attending Training Centre	4	8	8	5	6	Boys Girls	— —	— —	2 1	— 2	1 —	— —	— —	— —	3 3 } 6	
TOTAL	63	104	128	138	127	Boys Girls	4 5	4 2	12 9	12 16	13 14	9 14	7 7	4 5	65 72 } 137	

Table II shows that during the year an almost equivalent number of cases were seen at the Authority's medical hearing assessment clinics as in the previous year. As has been found in the past, almost a third of cases sent for failed to attend (561 of 1,826 cases or 30%). Those who were seen during the year necessitated a 73% referral rate for further treatment and it was noted that this was mainly of a minor nature and the number of cases requiring surgical treatment was fairly consistent.

The improved models now available in the Medresco range of National Health Service hearing aids has meant that the necessity for the provision of commercial hearing aids by the Authority has decreased. Once again the co-operation of the local hospital hearing aid centre has been very much appreciated.

Again we must state the difficulties in defining categories of cases appearing in Tables III and IV as severely deaf and partial hearing respectively. We adhere to the Department of Education and Science criteria and children who may have similar levels of handicap, but who are being educated in differently named establishments may appear under either category.

The tables reflect the relatively high number of new cases of significantly deaf infants found during the past few years in the city, but otherwise show little change. The Authority is now able to provide a good standard of educational treatment for the partial hearing child throughout the age range. It is felt that the new senior partial hearing unit has been particularly successful in the extent to which full integration of the hearing handicapped children has been possible in the comprehensive school.

As in previous years, we have been very appreciative of the provisions available to children from Cardiff at the Glamorgan Nursery School for the Deaf at Whitchurch. The delay in the completion of the residential school for the deaf at Penarth is regretted as it has meant the continuation of placements at great distances away from home on a residential basis for many of our severely deaf children. With the completion of this school during the forthcoming year, it is anticipated that many of these children could attend on a day pupil basis. Two of our senior deaf boys continue to attend at the Mary Hare Grammar School for the Deaf where they are making excellent progress and it is confidently expected that they will do well in 'O' level examinations.

CHILD GUIDANCE CLINIC

by Dr. JOHN LOWTHER, M.B., B.Ch., D.P.M., Consultant Psychiatrist

Clinical Staff

Consultant Psychiatrists	—	Dr. J. LOWTHER, M.B., B.Ch., D.P.M. Dr. G. LACEY, M.B., B.S., D.P.M.
Psychologists	—	Mr. G. BATE — North East Area Mr. J. DOWLING — South East Area Mr. P. GARDNER — South West Area Mr. R. ROBERTSON — North West Area Mrs. A. M. ROBERTSON — Special Schools
Social Workers	—	Mrs. HERBERT JONES Mrs. REES Mrs. N. SHALLCROSS
Secretary	—	Miss J. SERJENT

Child psychiatric facilities in the City of Cardiff have improved greatly over the past two years. The Welsh Hospital Board appointed a consultant child psychiatrist (Dr. G. Melville-Thomas) who opened the Child and Family Centre in 1969. Simultaneously the Local Authority Child Guidance Service was expanding rapidly. These improvements are very apt for Cardiff was in the van in this field when the Local Authority opened one of the earliest Child Guidance Clinics in the U.K. in 1935. This clinic has remained open continuously since then, but demands made on the clinic had increased enormously,

although the number of staff had remained unchanged until 1969. An indication of the growth of work load is that the number of children referred in 1970 showed an increase of 26% over the number referred in 1969.

All the staff of the Clinic are employed directly by the Local Authority and this has facilitated the organisation of an integrated child guidance/school psychological service. This reorganisation has been based on areas served by groups of High Schools and the surrounding primary schools. The psychologists are thus able to visit the schools in their area more frequently, and follow up children in both school and clinic.

Towards the end of 1970 two peripheral clinics were opened in the Ely and Llanrumney Clinics. This has been of great benefit to families in these areas who found the journey to North Road time consuming and expensive.

Psychiatrists

Dr. Lacey has clinical responsibility for the West side of the city and Dr. Lowther for the East side. Both spend 4 sessions in clinic work, 3 at North Road and 1 in their respective peripheral clinics.

Psychologists

The appointment of Mr. Dowling and Mr. Gardner brought the number of psychologists on the staff to 5. This is the staffing level recommended by the Underwood Committee for a city the size of Cardiff. Four psychologists are each responsible for a sector of the city whilst the fifth has responsibility for special schools.

Social Workers

The establishment for the service is 5 Social Workers. This is rather less than is warranted to balance the number of psychologists and psychiatrists in the team. The major setback however, was the resignation of 2 Social Workers during the year, so that for most of 1970 the clinic functioned with only 3 Social Workers. As each area team consists of a psychiatrist, psychologist and social worker, the shortage of social workers severely handicapped the efficiency of the clinic.

The secretarial work has increased considerably with the influx of new staff, and we are indebted to Miss Serjent for the hard work she has put into the clinic during the period of expansion and reorganisation.

The Clinic Buildings, North Road, are woefully inadequate to enable maximum efficiency to be gained from the enlarged team of workers. It is hoped that during 1971 steps can be taken to rectify this deficiency.

STATISTICAL ANALYSIS OF REFERRALS TO CHILD GUIDANCE CLINIC IN 1970

TABLE I
NUMBER OF CASES

	Boys	Girls	Total
No. of New Cases referred during 1970	240	126	366
No. of Old Cases carried forward	78	57	135

The number of new referrals is an increase of 77 over 1969. Of these 65 were boys and 12 girls.

TABLE II
SOURCES OF REFERRAL OF CASES SEEN FOR
FIRST TIME IN 1970

Parents or Guardian	..	..	..	..	38
Juvenile Courts	..	..	..	..	—
Probation Officers	..	..	..	..	5
Social Agencies	..	..	..	..	8
Schools	..	..	..	..	113
School Health Service	..	..	..	..	88
Other Medical Practitioners	..	..	..	..	39
Other Sources	..	..	..	..	44
TOTAL					335

Compared with 1969 there is a fall in referrals by the Juvenile Court, Probation Officer and other social agencies from 60 in 1969 to 13 in 1970. However, Dr. Lowther visited the Cardiff Remand Home weekly during 1970 to examine boys referred by these sources for psychiatric investigation. 57 boys were examined and 51 reports were submitted to the Juvenile Court.

The majority of children are referred to the clinic by schools and School Health Service.

Reasons for Referral

The behaviour disorders are the most common reason for referral although many children present with more than one symptom.

TABLE III
REASONS FOR REFERRAL

Nervous Disorders

Fears	..	..	..	..	..	27
Seclusiveness	..	..	..	..	..	12
Depression	..	..	..	..	..	12
Excitability	..	..	..	..	..	2
Obsessions	..	..	..	..	..	4

Habit Disorders and Physical Symptoms

Speech disorders	..	..	..	..	..	8
Sleep	..	..	..	..	..	11
Movement	..	..	..	..	..	9
Feeding	..	..	..	..	..	7
Excretory	..	..	..	..	..	46
Nervous pains and Paralysis	..	..	..	..	..	6
Fits, disorders	..	..	..	..	..	3

Behaviour Disorders

Unmanageable	..	..	..	..	..	96
Temper	..	..	..	..	..	26
Aggressiveness	..	..	..	..	..	34
Jealous	..	..	..	..	..	1
Demanding attention	..	..	..	..	..	14
Stealing	..	..	..	..	..	30
Lying and romancing	..	..	..	..	..	6
Truancy	..	..	..	..	..	60
Sex difficulty	..	..	..	..	..	6

Education and Vocational Difficulties

Backwardness	15
Inability to concentrate	8

For Special Examination

Educational Advice	14
Admission to Special Residential School ..	3

TABLE IV**AGES OF CHILDREN REFERRED**

Years ..	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	Total
Boys ..	—	2	2	5	9	22	22	29	27	21	22	20	16	11	7	2	217
Girls ..	—	—	7	2	4	6	17	12	10	10	12	12	8	10	6	2	118
TOTAL	—	2	9	7	13	28	39	41	37	31	34	32	24	21	13	4	335

TABLE V**NUMBER OF CASES DISCHARGED****Results of Treatment and Disposal**

Adjusted	39
Partially Adjusted	44
Advisory	87
Transferred (to S.H.S. etc.)	21
Failed to co-operate	39
Withdrawn	31
Left Cardiff	3
TOTAL	264

TABLE VI**WORK OF SECTIONS**

	Exam.	Treatment	Parents Interviewed	Others Interviewed	School Visits	Home Visits	Totals
Psychiatric ..	208	515	441	36	—	—	1,200
Psychological ..	140	95	128	7	108	—	478
Social	—	—	361	22	11	398	792
TOTALS ..	348	610	930	65	119	398	2,470

Conferences and Visitors to the Clinic

There have been 74 staff conferences; 15 visitors have been to the clinic.

PRESSWOOD HOUSE DIAGNOSTIC UNIT

During the calendar year 1970, 19 children (7 boys, 12 girls) were admitted to Presswood House School. Of these, 4 boys were admitted from home, 2 girls came from Ty Gwyn Special School, 3 boys and 10 girls from Infants' or Nursery Schools.

During the same period, 21 children (12 boys, 9 girls) left Presswood House School, having had their learning difficulties diagnosed and having received special education. Of these 7 children (3 boys, 4 girls) were transferred to Special schools for educationally-subnormal children or to special classes for slow learners in ordinary schools in the city.

One girl was transferred to Greenhill Open-Air School; 7 children (3 boys, 4 girls) were transferred to the Borderline Unit, Class 1, The Court School; 6 children (5 boys, 1 girl) were transferred to Ty Gwyn Special School for the severely mentally handicapped.

Of the 21 children who left Presswood House School during 1970, 11 children (7 boys, 4 girls) were multi-handicapped, i.e. suffered from more than two handicaps. These handicaps are analysed thus:—

1 child was severely subnormal, suffered from epilepsy, had speech defects; sight defects and was maladjusted;

1 child was educationally subnormal, had epilepsy, (convulsions occurred often) and had speech defects;

3 children were E.S.N. and had speech and sight defects;

1 child was E.S.N. and had severe sight problems;

6 children were E.S.N./S.S.N., affected by maladjustment, and were defective in speech;

9 children were E.S.N./S.S.N. with speech impairments. In addition the majority of pupils had behaviour problems, and being slow learning, a wide and often irregular range of perceptual difficulties.

V—NURSERY SCHOOLS AND CLASSES

Nursery Schools and Classes

There are nine Nursery Schools and two Nursery Classes in the city, situated as follows:—

Nursery Schools:	1.	CANTON	..	..	Severn Road
	2.	GRANGETOWN	..	..	Ferry Road
	3.	SPLOTT	..	..	Moorland Road
	4.	ELY	..	..	Vachell Road
	5.	SPLOTT (Tremorfa)	..		Baden Powell School
	6.	ELY	..	..	Hywel Dda School
	7.	SOUTH (Docks)	..		West Close, Bute Street
	8.	RUMNEY	..	..	Rumney School
	9.	ELY PLAY CENTRE	..		Archer Road
Nursery Classes:	1.	NINIAN PARK	..	..	Ninian Park School
	2.	ADAMSDOWN	..	..	Tredegaville C/W School

Accommodation is provided at the Nursery Schools for a total of 208 full-time and 564 part-time children aged 2–5 years. At the Nursery Classes 34 children aged 3–5 years are accommodated full-time and 76 children part-time.

Health visitors pay a visit to each Nursery School and Class at least once in each week and very often at more frequent intervals as such visits become necessary. A Medical Officer visits the Nursery Schools and Classes at intervals of approximately one month for the purpose of medically inspecting new entrants and of reviewing the health of pupils.

VI—MISCELLANEOUS

INFECTIOUS DISEASES

The number of school children ascertained to be suffering from infectious diseases during the year were as follows:—

Scarlet Fever	..	..	..	..	..	12
Whooping Cough	..	..	..	..	..	13
Diphtheria	..	..	..	..	..	—
Measles	..	..	..	..	..	453
Acute Pneumonia	..	..	..	..	..	—
Meningococcal Infection	..	..	..	..	..	—
Paralytic Poliomyelitis	..	..	..	..	..	—
Non-Paralytic Poliomyelitis	..	..	..	..	..	—
Acute Encephalitis – Infective	..	..	..	..	..	—
Dysentery	..	..	..	..	..	7
Para-Typhoid Fever	..	..	..	..	..	—
Enteric or Typhoid Fever	..	..	..	..	..	—
Erysipelas	..	..	..	..	..	—
Food Poisoning	..	..	..	..	..	3
Tuberculosis – Respiratory	..	..	..	..	..	9
Acute Meningitis	..	..	..	..	..	13
Hepatitis	..	..	..	..	..	142

In addition the following children were notified by Head Teachers as absent from school due to the diseases stated:—

Rubella	..	..	..	..	..	74
Mumps	..	..	..	..	..	230
Jaundice	..	..	..	..	..	25

PROVISION OF MEALS AND MILK

Central kitchens are in operation at Ely and Tremorfa and provide approximately 3,954 meals per day for consumption at 42 schools.

Self-contained kitchens are situated at 73 schools and 6 nurseries.

Canteens. Facilities are available at 160 school canteens for providing midday meals for approximately 21,908 children daily.

The number of children attending primary, high, special and nursery schools, provided with dinners and/or milk during the first and last complete weeks of 1970 were as follows:—

	<i>First Complete week, 1970</i>	<i>Last Complete week, 1970</i>
Average number of necessitous children provided with dinner daily free	5,959	6,256
Average number of children provided with milk daily free	16,430	15,127
Average number of children provided with dinner daily on payment	27,105	26,617

MEDICAL EXAMINATIONS OF TEACHERS AND ENTRANTS TO COURSES OF TRAINING FOR TEACHING AND TO THE TEACHING PROFESSION

The School Medical Officer is an examining medical officer for the Education Committee in respect of the entry of teachers into the superannuation scheme. During the year 93 teachers were examined for this purpose.

From 1st April, 1952, the Minister of Education instituted new arrangements for medical examinations for entrants to the teaching profession and for candidates applying for entry to training colleges, university departments of education and approved art schools (Circular 249, 28th March, 1952).

The school Medical Officer has the duty of examining candidates applying for admission to training colleges and entrants to the teaching profession except those intending to enter the teaching profession on completion of an approved course of training, in which case they are examined as at present by the College Medical Officer. The school Medical Officer has to fulfil this last obligation in respect of students completing courses at the Cardiff College of Art as he acts as the College Medical Officer.

As a result of these requirements, 223 candidates and entrants were medically examined.

The Minister also directed that X-ray examinations shall be an essential part of the medical examination on entry to the teaching profession (Circular 3, 28th January, 1969).

Accidents to Pupils

Head Teachers are requested to provide details of all accidents occurring to pupils on school premises or arising out of school activities. During 1970 737 such reports were made.

DESCRIPTION OF REGULAR CLINICS

	Minor Ailments	Cleansing	Ophthalmic	E.N.T.	School Dental Service	Speech Therapy	Enuresis
(a) Public Health Clinics available for School children							
Gabalfa Clinic, 213 North Road	Yes	—	Yes	Yes	Yes	Yes	—
College Farm Clinic, Llanidloes Road	Yes	—	Yes	Yes	Yes	—	—
Grangetown Clinic, Cambridge Street	Yes	—	Yes	Yes	Yes	Yes	—
Canton Clinic, Wessex Street	Yes	—	Yes	Yes	Yes	—	Yes
Fairwater Clinic, Plasmawr Road	Yes	—	Yes	Yes	Yes	—	—
Ely Clinic, Redhouse Crescent	Yes	Yes	Yes	Yes	Yes	—	—
Llanishen Clinic, Newborough Avenue	Yes	—	Yes	Yes	Yes	—	—
Treatment Centre, 1 Curran Road	—	Yes	—	—	—	—	—
Llanrumney Clinic, Llanrumney Avenue	Yes	—	Yes	Yes	Yes	Yes	Yes
Roath Clinic, Roath Court Road	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Splott Park Clinic, South Park Road	Yes	Yes	Yes	Yes	Yes	—	—
Rhiwbina Clinic, Groes Lon	Yes	—	Yes	Yes	Yes	Yes	—
Whitchurch Clinic, Bishops Road	Yes	—	Yes	Yes	Yes	Yes	—
(b) Health Centres where School Clinics are held:							
Butetown Health Centre, Loudoun Square	Yes	—	Yes	Yes	Yes	—	—
Trowbridge Health Centre, Abergele Road	Yes	—	Yes	Yes	—	—	—

N.B. Speech Therapy Sessions are also held at Rumney, Greenway and Trowbridge Infants' Schools, Glan-yr-Afon Junior School, Pen-yr-Heol Special Class, Presswood House Diagnostic Unit and Llanishen Court Special School.

VII—STUDENT HEALTH SERVICE

IN THE COLLEGES OF FURTHER EDUCATION

Report by Dr. G. F. NEWBOLD, M.B., B.S.(Lond.), M.R.C.S., L.R.C.P.,
M.M.S.A., D.R.C.O.G., D.C.H.

Administration

This year, 1970, was a very busy one for the Student Health Service. The volume of work continued to escalate and the conditions for which we were consulted ranged over a very wide field. The official allocation of time spent in the colleges was 6 sessions (3 days) weekly. In addition to these I continued to undertake one, sometimes two, additional sessions each week during the evenings until 7.00 p.m. – 8.00 p.m. On numerous other occasions I also paid irregular visits to all the colleges whenever possible. This I have found to be necessary in the best interests of many of those students who come to us for advice and for treatment. I also made occasional emergency domiciliary visits to sick students who were not registered with a local general practitioner. A supply of the most useful drugs is kept in the medical rooms of all the colleges for emergency use and throughout the year there was a rise in the number of students who expected to receive treatment directly from the College Medical Service.

A highlight of the year was the official opening of the new College of Art buildings in Howard Gardens by the Earl of Snowden. The completion of this second stage of the college also meant that, once again, we were faced with the problem of equipping a new medical room. The College of Music and Drama also celebrated its national status by officially becoming the Welsh College of Music and Drama.

The clerical work involved continued to be considerable and was shared by the colleges' health visitor, Mrs. M. P. Davies, S.R.N., H.V., and myself – a procedure which is really the only practicable one in a service which is peripatetic in nature. However, as on former occasions, I am pleased to acknowledge with thanks the help given to us from time to time by the clerical staffs of the various colleges and the Health Department who have always been ready to assist us should this have been necessary on any special occasions.

Mrs. Davies, who is responsible for the supervision of students' lodgings, also reports that, during the year under review, she was heavily engaged in dealing with the many social problems which are inseparable from life in our colleges and universities.

We were frequently consulted by the teaching staffs of the colleges if it appeared that a student's work might be affected by ill-health. One interesting aspect of these requests is the light which they throw on the attitude of students to their work. In all of the colleges we have, from time to time, been particularly impressed by the way in which many students have attended lectures, etc., in spite of illness. This, surely, indicates a strong motivation in applying themselves to their studies and refutes in some measure the rather popular idea that students, as a whole, are lazy and wasteful of time and money during the years they spend in college.

Control of Tuberculosis

No tuberculin skin tests were carried out during the year. This was largely because pressure of other work gave us insufficient time to make arrangements for this to be done. Instead, reliance was placed upon proof of a fairly recent and satisfactory B.C.G. vaccination and/or a chest X-ray. This, incidentally, is the current practice adopted by the majority of University student Health Services in the United Kingdom. No case of tuberculosis was reported in any of the colleges during the year, but two students were recalled by the Chest Clinic for further investigation following routine radiography. One of these proved to be a case of unresolved pneumonia and the other showed a cardiovascular abnormality.

Psychosomatic Illness

As in previous years, illness due to emotional and psychological stress and anxiety continued to form a high proportion of the complaints for which students sought advice and help. Not infrequently such conditions were intimately interwoven with the content of their studies, and one of the functions of the Service is to enable students to make the most effective use possible of their time in college. Fortunately, in only very rare instances did it become necessary for me to advise, as a last resort, that a student discontinued his or her studies because of this type of illness. In the great majority of cases it was possible to enable them to carry on and complete their courses in a satisfactory way.

Examples of conditions which greatly interfered with efficient work were recurring and severe migraine, asthma and neurodermatitis. Severe dysmenorrhoea and irregular menstruation or menorrhagia (mainly in Drama and Music students or in those whose work involved certain social or public activities) were also frequent complaints for which relief was sought.

Not unnaturally some degree of depression frequently co-existed with the anxiety which was always present in such conditions. Insomnia was also a troublesome symptom in many cases, although this was not invariably so. In the majority of cases, the depression was short-lived, although in certain students the condition tended to recur if they found themselves in situations with which they felt themselves unable to cope unaided. The underlying cause of anxiety and depression in several students was not, primarily, connected with their work, but the fear that they had some incurable or terrible disease. One, for example, suffered a sudden collapse, with unconsciousness, because of a physical defect of which he was afraid. It is gratifying to record that in nearly all of these cases it was possible to relieve this burden of anxiety so that the individuals affected could once more apply themselves to their studies. Psycho-sexual problems were common and, on occasions, these were associated with an acute mental conflict which concerned the morality and ethics of a student's behaviour.

To certain students, whose physical appearance was likely to be of more than usual importance in their future professional careers, conditions such as overweight and obesity warranted special consideration. Such individuals tended to become depressed and, in turn, this depression gave rise to further over-eating so that a vicious circle was liable to be established.

Among the more purely psychological disturbances, without prominent somatic symptoms, was a case of severe endogenous depression and a student who developed an acute psychosis. Both of these required admission to hospital.

The treatment of the great majority of those students presenting with psychological or psychosomatic symptoms was undertaken directly by the Student Health Service. Some however, required referral to hospital for further investigation before a diagnosis of psychosomatic disorder could be made with reasonable certainty. Once a non-mental aetiology had been excluded treatment was directed along the lines of psychotherapy plus the short-term use of sedatives or tranquillisers, if these were thought to be necessary.

In certain cases hypnotherapy was successfully employed where other methods had failed to bring about relief. Two representative examples may briefly be quoted. The first was a case of intractable and compulsive nail-biting which had persisted over many years and which had been entirely unresponsive to many previous attempts to put an end to it. The cure of this condition was regarded as important because of possible repercussions on her future career if it persisted. The second was a student who was troubled with an incapacitating menstrual irregularity which was frequently a source of great anxiety and considerable embarrassment. Menstruation would start suddenly, without any prior warning whatsoever, and nearly always at a most inconvenient moment. As her ambition was to be a professional actress the disability was unusually distressing – especially as the initial flow tended to be a heavy one. At first she was given the contraceptive pill in order to bring about a regular cycle, but this had to be discontinued because of the occurrence of depression and other undesirable side effects. After a few hypnotic sessions, it was possible to bring about considerable amelioration of the condition, although the

cycle did not become a regular one. Instead, menstruation would start at a convenient time – e.g. on waking in the morning and with some initial warning of its onset. It thus became possible to live without the fear that a period would suddenly start at an acutely embarrassing moment, such as when appearing ‘on stage’ before an audience. It is possible that if treatment could have been continued over further cycles, a more regular pattern would have been established as well.

Analysis of Consultations

Following the practice of previous years students were seen:—

1. as a result of the information disclosed in their confidential medical questionnaires;
2. if a specific request was made by the student himself; and
3. if I was asked to do so by a member of the teaching staff.

All students were free to consult us whenever they wished to do so. The number of such direct requests (2 and 3) continued to show an increase throughout the year. Although I have been able to maintain the ready accessibility of the service for the most part it was necessary, on occasions, because of the large numbers involved, to arrange for consultations by appointment. This particularly applied to requests for treatment, e.g. by hypnotherapy, when students were seen during the evenings after normal college hours.

Table V classifying the complaints for which students were seen includes, as in previous years, the conditions disclosed in their medical histories as set out in the questionnaires as well as those for which we were consulted directly by the student. These have not been separated into distinct columns. The proportion of the latter, however, continues to rise year by year. If two or more conditions were disclosed at the same time these are treated as separate items.

The complaints for which students were seen are classified under the most prominent symptom. I have followed this system also, to a large extent, when dealing with those which could properly be regarded as psychosomatic in nature, unless the psychogenic component was so marked that it could, more appropriately, be grouped under this heading.

Miscellaneous Cases of Interest

During the year two cases of syphilis were encountered, although both were already under treatment when first seen. A number of students complained of leucorrhoea, with or without urinary symptoms, but, fortunately, no case of gonococcal infection was discovered. Two students who came for consultations because of abdominal pain were found to have acute appendicitis, which necessitated immediate admission to hospital and operation.

A number of cases of glandular fever occurred in the various colleges and sore throats were a common occurrence, as was an influenza-like type of illness which was mainly prevalent during the Michaelmas term. Four students complained of a lump in the breast and all were referred to hospital for investigation. In two cases fibroadenomata were removed and the others were kept under observation. In one of the latter the ‘tumour’ resolved spontaneously.

Isolated cases of illicit drug taking in three of the colleges were brought to my notice during the year. Fortunately, although such practices have always to be taken seriously, they did not constitute a major problem in any way. I have also good reason to believe that we were able to persuade two of the students concerned to renounce the desire to experiment with dangerous or harmful drugs.

‘Fainting attacks’ were encountered from time to time in all the colleges, and if any possibility of epilepsy was present, the students were referred to a neurologist for further investigation. Of those so referred, two had abnormal E.E.G. tracings of an epileptiform type and were put on anti-convulsants. In addition to these one case of rapid insulin coma occurred during a lecture.

Several students who had spent recent holidays abroad developed symptoms of tropical illnesses. These were mainly of a gastro-intestinal nature, e.g. dysentery and tapeworm infestation, but one case of clinical malaria was seen. A case of trachoma was seen in a student from the Middle East and he was referred to hospital for the opinion of a Consultant Ophthalmic Surgeon.

One interesting example of extra-sensory perception in an otherwise perfectly normal and healthy individual is worth recording. I was consulted by this particular student because the paranormal experiences to which she was sometimes subjected had begun to alarm her. After reassurance she lost her anxiety and felt very much better as a result.

Other Activities

A course of lectures on 'Medical Emergencies' was given to the Chiropody students at Llandaff Technical College and a short course on 'First Aid' to the first-year apprentices at Rumney Technical College. The supervision of matters concerned with hygiene in departments such as those of Food Technology and Hairdressing was undertaken and advice was given, when necessary, on the medical aspects of physical education and ionising radiations.

During the year I saw certain students on behalf of the Department of Education, if their histories warranted a medical opinion, prior to their admission to a College of Further Education or a University. Routine examinations were also carried out for the Department of Education and Science on final year students who were proposing to enter a Teachers Training College, and on all those at the College of Art who had successfully completed the A.T.C. Course. Certain groups were medically examined as a routine on entry, e.g. the Nursery Nurses and Bakery and Catering students.

Various procedures such as vaccination against smallpox and immunisation against tetanus, typhoid and polio were carried out as required. Medical examinations were also performed for those students who required certificates of fitness prior to taking up employment or travelling overseas, etc.

During the Easter term the clinical trial of an oral vaccine for use in the prophylaxis of the common cold and other respiratory infections was concluded. More than seventy students volunteered to participate in the trial, which was conducted strictly in accordance with the recognised 'double-blind' principle, and the result proved highly significant in favour of the efficacy of the actual vaccine used.

During the year I corresponded with other local authorities in the United Kingdom who were about to set up a Student Health Service in their own areas and who were interested in the one provided for students in Cardiff. I also visited the Federal Republic of West Germany in order to read a paper on 'Psychosomatic Illness among College Students' at an international medical conference.

In conclusion, it is once again my pleasant task to acknowledge with thanks the help given to us by the Principals and teaching staffs of the colleges, and by those general practitioners and hospitals who readily gave us their co-operation when necessary.

Health Visitor's Accommodation Visits

The following figures relate to new accommodation offered to the colleges and which, because of the other heavy commitments of the service, could only be visited during the summer vacation, prior to the entry of new students.

Accommodation Visits	..	..	45
Information Incomplete	..	..	31
No Replies	..	..	13

Mrs. Davies, the Colleges' Health Visitor, also spent one week at the Adfer Unit, Whitchurch Hospital, where a symposium was held on the various medical and social aspects of drug addiction and also attended the International Conference of Drug Addiction and Alcoholism, which was held in Cardiff on 21st - 25th September.

TABLE I

	Llandaff Technical College	College of Food Technology and Commerce	Welsh College of Music and Drama	College of Art	Rumney Technical College
Number of Full-Time Students	313	804	121	337	110
Number of Full-Time First Year Students ..	103	487	59	158	68
Number of Part-Time Day Students ..	2,525	1,465	650	30*	1,373

*This figure shows the number on 31st December, 1970. On 1st September, 1970, 250 part-time day students were transferred to Llandaff Technical College.

TABLE II
(Showing Number of 'Complaints' per Student)

	1	2	3	4	5+
Llandaff Technical College	165	33	3	4	1
College of Food Technology and Commerce	639	345	175	110	117
Welsh College of Music and Drama ..	77	93	35	13	6
College of Art	173	139	25	4	2
Rumney Technical College	132	23	3	1	—

TABLE III
(Showing Number of Consultations per 'Complaint')

	1	2	3	4	5+
Llandaff Technical College	181	24	4	1	—
College of Food Technology and Commerce	1,054	198	70	28	33
Welsh College of Music and Drama ..	153	39	16	10	15
College of Art	288	42	8	2	4
Rumney Technical College	141	15	—	—	—

TABLE IV
(Number sent for chest X-ray)

	Referred	Results
Llandaff Technical College	29	23
College of Food Technology and Commerce	110	345
Welsh College of Music and Drama	30	71
College of Art	84	114
Rumney Technical College	36	49

N.B. Any difference between the numbers shown under "Referred" and those shown under "Results" is partly explained by the fact that some X-ray reports were not received until after 1st January, 1971. Also some results were received of X-rays carried out prior to 1st January, 1970.

TABLE V

Showing Classification of "Complaints" for which the Department was Consulted.
(These figures do not include attendance for Chest X-ray or Polio Immunisation)

	Llandaff Technical College	College of Food Tech- nology and Commerce	Welsh College of Music and Drama	College of Art	Rumney Technical College
Cardio-vascular disease (in- cluding history of rheumatic fever and anaemia)	11	40	3	16	1
Chest (including tuberculosis) ..	16	70	9	19	9
Musculo-skeletal (including accidents)	30	217	20	28	27
Psychological and emotional (including C.N.S.)	12	128	33	27	6
Eyes (mainly defective vision) ..	13	70	9	21	12
Gastro-Intestinal	16	109	11	20	16
Genito-urinary (including gynaecological)	19	202	94	63	4
Ear, Nose and Throat	31	212	35	40	30
Skin	21	159	23	48	7
Miscellaneous (including some allergies, endocrine, vaccina- tion, immunisation, blood tests, P.V.O. routine medicals and dental)	78	323	78	111 (Including full medical exams. of 64 prospec- tive teachers on behalf of Dept. of Educ. and Science)	53

ENVIRONMENTAL HEALTH SERVICE

REPORT FOR 1970

of W. BATE, M.B.E., M.A., D.P.A., F.R.S.H., F.A.P.H.I.

The pattern of this report shows little change from that of recent years, dictated as it is by the need to include reports and figures required by government departments and to provide information for members of Cardiff City Council, the general public and students of the various subjects contained in it.

The nature of the work entailed in environmental health protection is such that one is never able to report any dramatic or even noticeable changes within the short-term. Each year is primarily filled with the persistent pressing forward of routine tasks which it is hoped will consolidate the achievements of the past. Consistent with this, one attempts gradually to expand particular services as needs require. During this year, for example, the task of ridding the city of unfit houses has been accelerated, there has been an increase in the number of houses improved, and the department's activities in the field of noise control has been extended. These subjects and others are included in the following pages:—

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STAFF

The staffing position has deteriorated, there being 6 public health inspector vacancies at the end of the year. Mr. N. Gatehouse and Mr. D. Parfitt resigned in order to take up similar posts with Cwmbran U.D.C. and Solihull C.B.C. respectively. Mr. W. V. Barraby retired on the 16th May 1970 after 32½ years service with the Corporation.

Three pupil public health inspectors qualified during the year. Mr. D. Lewis and Mr. D. Gardner were appointed as district inspectors, the third, Mr. B. Holmyard, left the department and later obtained a post as district inspector with Leamington Spa.

Three pupil public health inspectors, Messrs. N. Jordan, C. Mugford and M. Evans were appointed in September.

HOUSING

The year 1970 saw the first full year of the Council's slum clearance programme 1970 - 1974 and of implementing the Housing Act 1969. The result has been a considerable expansion of work and an increasing burden on the housing section of the department with no corresponding increase in staff. The revised slum clearance programme requires that an average of more than 400 houses annually, compared with 200 houses previously, shall be made subject to clearance or compulsory purchase orders. This target has been achieved during the current year. As a result however, this will mean that during the forthcoming year much more time will need to be diverted to the increased number of Public Local Inquiries which will result, and to the increase of administrative work which will ensue. Whether the present pace in slum clearance can be maintained during the forthcoming year without an increase in staff is a matter of some concern.

Clearance Areas and Compulsory Purchase Order Areas

Grangetown (Areas 2 and 3) Compulsory Purchase Order 1969

This Compulsory Purchaser Order was confirmed by the Secretary of State on the 30th July subject to the transfer of five houses from Part I (clearance areas) to Part II of the Schedule to the Order (lands adjoining the clearance areas), and the exclusion of five properties from the Order. Well-maintained payments were directed to be made in respect of 26 houses.

Adamsdown (Areas 9 – 15) Compulsory Purchase Order 1969

A Public Local Inquiry was held into the making of this Order on the 17th March. The Minister of State confirmed the Order on the 12th August subject to the transfer of six houses from Part I (clearance areas) to Part II of the Order (lands adjoining the clearance areas). Well-maintained payments were directed to be made in respect of five houses.

Riverside (Areas 7 – 26) Compulsory Purchase Order 1970

These areas were made subject to a Compulsory Purchase Order on the 23rd March. A Public Local Inquiry was held into the making of the Order on the 4th August. The Minister of State has not yet made known the outcome of the application for confirmation of the Order.

Future Clearance Areas

During the year housing inspections were carried out in the areas tabled below which are included in the slum clearance programme. Butetown (Areas 20 – 23), North Road (Areas 1 and 2) and Canton (Area No. 2), have been made subject to Compulsory Purchase Orders. The remaining three areas have been declared by the Health Committee to be Clearance Areas and are to be made subject to Compulsory Purchase Orders:—

Area	No. of houses inspected	No. of unfit houses	Date of CPO	Clearance Areas	
				Families to be displaced	Persons to be displaced
Butetown (Areas 20–23) ..	243	197	23.12.70	218	657
North Road (Areas 1 & 2) ..	7	6	8.12.70	5	10
Canton (Area No. 2) Gray Street	14	11	10.12.70	12	30
Canton (Areas 3 & 4) Avon Street ..	56	53	—	53	139
Canton (Area No. 5) Harvey Street ..	33	28	—	31	82
Adamsdown (Areas 16 & 17) ..	89	75	—	79	231
Totals ..	442	370	—	398	1149

Thirty-nine houses in Edward Street (Central) and 15 houses in Windsor Road (Adamsdown) which are included in the Council's slum clearance programme have also been inspected. These are within the Central Development Area and are subject to the Compulsory Purchase Order made for that area. Thus, during the year a total of 496 houses which were included in the Council's slum clearance programme have been inspected.

An area of housing in Adamsdown (Helen Street and Nora Street) containing 125 houses is at present being inspected with a view to its representation for clearance in 1971.

Well-maintained Payments

When confirming the Grangetown (Areas 2 & 3) Compulsory Purchase Order 1969 and the Adamsdown (Areas 9 – 15) Compulsory Purchase Order 1969 the Minister of State directed the Council to make well-maintained payments in respect of 26 houses in the

Grangetown Areas and five houses in the Adamsdown Areas. Twelve of these houses are owner/occupied. In accordance with the Housing Act 1969 the owners of these houses will be entitled to a supplementary payment which will bring their compensation up to full market value. In these cases a well-maintained payment cannot be made in addition to full compensation.

Well-maintained Payments

Compulsory Purchase Order Area	No. of Payments		Amount
	Directed	Actual	
Grangetown Areas 2 and 3	26	17	£2,744
Adamsdown Areas 9-15	5	2	£336

Individual Unfit Houses

During the year 14 unfit houses were dealt with by individual action as shown in the table below:—

Housing Acts 1957 to 1969	No. of houses	Displacements	
		Families	Persons
Unfit houses made subject to Closing Orders	7	10	33
Unfit houses subject to voluntary undertakings to close	3	3	14
Unfit houses subject to voluntary undertakings to demolish	1	1	2
Parts of buildings made subject to Closing Orders	2	2	6
Closing Orders determined after repair	1	—	—
Totals	14	16	55

Closing Orders

20 Augusta Street
8 Windsor Road
51 Ferry Road
102 Portmanmoor Road
6 George Street
2 Stuart Street
14 South William Street

Voluntary Undertakings to Close

32 Longcross Street
97 Broadway
7 Planet Street

Voluntary Undertaking to demolish

4 Bridge Street, Llandaff

Parts of Buildings subject to Closing Orders

127 Cathays Terrace
212 Clive Street

Closing Order determined after repair

4 Wells Street

Housing Act 1964. Improvement of Dwellings outside Improvement Areas

During the year four representations were made by tenants for the exercise by the Council of their powers to require the owners to improve the dwellings by the provision of one or more of the amenities lacking in the dwellings. In each case the owner has been notified of the tenant's representation.

Housing Act 1969. Qualification Certificates

Under the provisions of the Act 112 applications were received for the issue of Qualification Certificates for the conversion of controlled tenancies to regulated tenancies where the dwelling satisfies the qualification conditions. The procedure is complicated and many of the applications, some of them from long established Estate Agents, failed to satisfy the fundamental requirement that the dwelling should be provided with all standard amenities. Consequently a great deal of time was unnecessarily wasted in visits and correspondence.

Qualification Certificates

Applications received	Certificates issued	Provisional certificates issued	Refusals	Pending
112	24	1	17	70

Demolitions

In areas previously made subject to Compulsory Purchase Orders associated with Clearance Areas, 130 houses were demolished during the year.

Displacements

During the year 180 families comprising 523 persons were rehoused into Corporation houses from Compulsory Purchase Order Areas associated with Clearance Areas and from individual unfit houses.

Local Land Charges Register

The following table sets out the numbers of Land Registry Searches made over the past five years. Each search requires careful investigation particularly with regard to slum clearance. The importance of these searches is reflected in the increasing number of enquiries and correspondence from purchasers and vendors.

Year	1966	1967	1968	1969	1970
Searches	5952	6313	6963	7368	7361

Corporation Mortgages

All applications for mortgages with the Corporation are referred to the department by the City Treasurer for a report as to their suitability for loan. The increase in the number of applications during 1970 as compared with 1969 is indicative of the easing of financial restrictions during the current year. A table of the number of houses referred to and investigated by the department over the past five years is set out below.

Year	1966	1967	1968	1969	1970
Investigations	1808	1127	1047	847	1275

Improvement Grants

The City Engineer and Surveyor refers to the department for investigation all applications made for improvement grants. During the year, 511 applications were received as compared with 168 applications during 1969. This increase reflects the impact of the 1969 Housing Act and the increased grants which have been made available.

House Repairs

The total number of notices served under all Acts was 875 preliminary notices and 164 statutory notices. The following summary gives principal details:

External

Roofs to be repaired or reslated	238
Gutters and rainwater pipes to be repaired, etc.	126
Walls and chimneys to be repointed/repared	65
Yards, paths to be repaired or resurfaced	2
Soil pipes to be repaired/renewed	6
Drains to be cleared/repared	258
Cesspools to be repaired/cleaned	2

Internal

Dampness to be cured	244
Interior walls and ceilings to be repaired	188
Floors to be repaired	67
Staircases, etc., to be repaired	8
Fireplaces and flues to be repaired	32
Verminous/filthy premises to be cleaned	12

In addition to work carried out by notices, works of repair were carried out by the Corporation by agreement with the owner at six houses in the city, at a total cost of £400.25 which will be recovered by instalments.

Legal Proceedings

The following is a tabulation of the outcome of legal proceedings to secure the abatement of nuisances.

Defendant No.	Offence	Fines	Costs	Total Penalties	Nuisance Order
51	Did fail to comply with a notice served under section 93 of the Public Health Act 1936	—	£10	£10	21 days
52	Do.	—	£10	£10	21 days
25	Do.	—	£5	£5	28 days
*26	Do.	—	Case Withdrawn	—	—
29	Do.	—	£5	£5	28 days
*30	Do.	—	Case Withdrawn	—	—
33	Do.	—	Adjourned sine die	—	—
35	Do.	—	—	—	28 days

*Works completed prior to court hearing

Rent Act

PART I.—APPLICATIONS FOR CERTIFICATES OF DISREPAIR

	1970	1969	1968	1967
1. Number of applications for certificates ..	—	2	2	3
2. Number of decisions not to issue certificates ..	—	1	Nil	Nil
3. Number of decisions to issue certificates ..	—	1	2	4
(a) in respect of some but not all defects ..	—	1	2	4
(b) in respect of all defects	—	—	—	—
4. Number of undertakings given by landlord under paragraph 5 of the First Schedule ..	—	—	—	1

5. Number of undertakings refused by local authority under proviso to paragraph 5 of the First Schedule	—	—	—	—
6. Number of certificates issued	—	1	2	2

PART II.—APPLICATIONS FOR CANCELLATION OF CERTIFICATES

7. Application by landlords to local authority for cancellation of certificates	6*	—	4	1
8. Objections by tenants to cancellation of certificates	—	—	—	—
9. Decisions by local authority to cancel in spite of tenant's objection	—	—	—	—
10. Certificates cancelled by local authority	5	—	4	1

* This figures includes 1 application which has been deferred.

Houses in Multiple Occupation

The house-to-house survey of three storey premises which was started in 1969 has continued throughout the year, and a further 2,073 houses have been visited. Of these, 400 houses were found to be occupied by three or more families and were inspected for the first time. This brought the total number of houses known to the department to be so occupied to 838.

As a result of these inspections it was necessary to serve 83 notices under section 15 of the 1961 Housing Act, in order to provide additional facilities. Progress made by the end of the year is set out below.

				Notices served	
				Preliminary	Statutory
(1) Number served .. .. .	..	..	..	83	15
(2) Work completed .. .. .	..	..	..	39	6
(3) Work partly completed .. .. .	..	..	..	3	1
(4) Not expired 31.12.70 .. .. .	..	..	..	26	8

Items included in the notices were as follows:—

1. Improvement or provision of ventilation .. .. .	..	..	..	73
2. Provision of hot/cold water supply .. .. .	..	..	..	38
3. Provision of additional sinks .. .. .	..	..	..	26
4. Provision of additional lighting points .. .. .	..	..	..	22
5. Provision of additional cooking facilities .. .. .	..	..	..	14
6. Provision of space heating .. .. .	..	..	..	1

In addition, two houses were found to be statutorily overcrowded, and directions fixing maximum numbers were issued.

Legal Proceedings

Two summonses were taken out during the year in the case of failure to provide information as to the ownership and occupation of two houses under section 170 of the Housing Act 1957. The same person was involved in both cases and fines of £2 10s. 0d. were imposed in each instance.

Members of the department appeared in court on six occasions to give evidence of occupation for the Chief Fire Officer who had instituted proceedings under section 16 of the Act, in cases of failure to provide means of escape in case of fire.

AIR POLLUTION

The tabulation of air pollution records are in part similar to previous years. However it has been possible this year to compare the local levels of pollution to those experienced in the country as a whole. It was also possible during 1970 to conduct limited investigations into pollution from road vehicles and levels of trace metals to be found in the air.

Deposited Matter

Figure 1 indicates the level of deposited matter at each of the three sites. The pollution at the City Hall and Curran Road sites shows a slight decrease, while Moorland Road shows a slight increase on the reading for the previous year. This slight increase shown at Moorland Road may possibly be due to building construction being carried out near the site.

Table 1 show the Winter and Summer averages of pollution due to sulphur dioxide smoke and deposited matter. Generally speaking smoke pollution during Winter is two to three times that experienced in Summer. Sulphur dioxide is something less than double, whilst the amount of deposited matter is more or less the same in Summer as in Winter.

Smoke

The measurements of smoke are shown in Table 2. The trend for each of the measuring stations for the past ten years is shown in Figure 2.

Figure 3 shows the level of smoke in the city in comparison with the Welsh and National levels of smoke concentration. It can be seen that there is a slight drop in the average level of smoke pollution in Cardiff this year. This follows slight increases in each of the previous three years which was giving cause for concern. It is to be hoped that this is a trend that will continue. The fall in the average level results from slight decreases in smoke measured at three of the six stations.

Sulphur Dioxide

The levels of sulphur dioxide pollution over a period of ten years are indicated by Table 3 and Figure 4.

Figure 5 shows the level of sulphur dioxide (as an average of the six measuring stations in Cardiff) compared with the Welsh and National levels.

The diagram indicates a general trend towards increased pollution by sulphur dioxide in Cardiff and Wales – which is not the case in the country as a whole. The increase was most marked between 1967/69, and probably reflects changes in fuel consumption pattern, with a swing towards fuels with oil and coal which have higher sulphur contents.

However, an encouraging fall of this form of pollution was measured in 1970; the situation needs to be watched carefully. It is the reverse of progress that at none of the measuring stations in Cardiff during 1969 and 1970 was the level of sulphur pollution less than that recorded in 1961.

Fig. 1. Yearly Average of Monthly Rates of Deposition
in Tons per square mile.

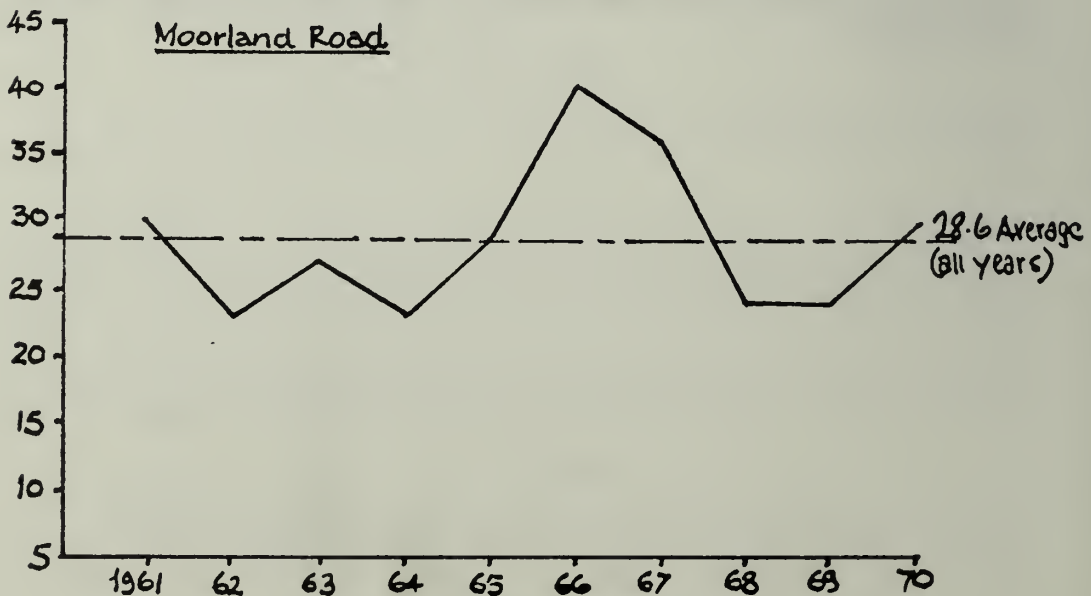
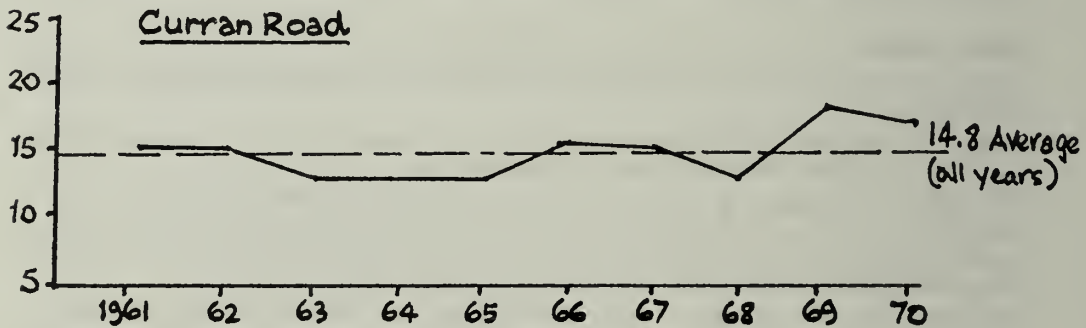
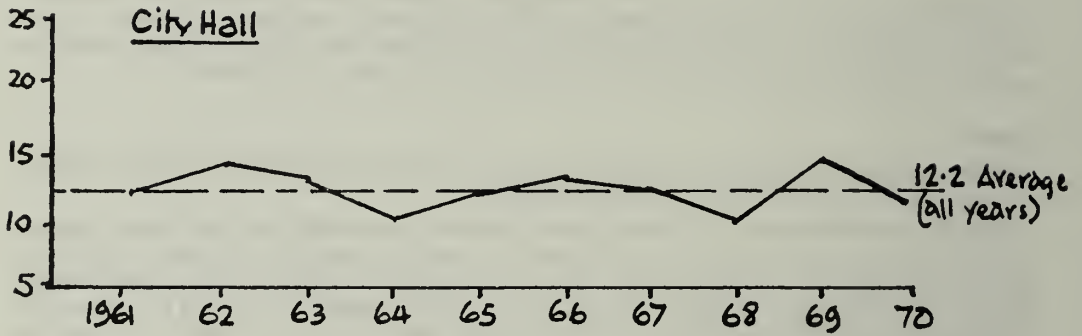


TABLE I
Comparison of Winter and Summer Averages October 1969 - September 1970

	Winter Average: October-March						Summer Average: April-September						Annual Average					
	City Hall	Curran Road	Moorland Road	Llanishen Res.	Croft Street	Llanrunney Clinic	City Hall	Curran Road	Moorland Road	Llanishen Res.	Croft Street	Llanrunney Clinic	City Hall	Curran Road	Moorland Road	Llanishen Res.	Croft Street	Llanrunney Clinic
SMOKE microgrammes/cubic metre ..	58	65	79	18	87	37	25	39	39	11	29	20	44	53	52	23	51	28
SULPHUR DIOXIDE microgrammes/cubic metre ..	133	114	167	58	98	73	83	71	76	42	60	52	107	91	118	48	94	61
DEPOSITED MATTER tons/sq. mile	12	18	35	—	—	—	13	16	25	—	—	—	12	17	30	—	—	—

TABLE 2

Average, Highest and Lowest Values of Pollution by Smoke
(microgrammes per cubic metre)

National Ref. No.			1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
D1	City Hall	Average	51	48	43	42	35	32	32	44	39	44
		Highest value	—	407	245	254	310	230	148	255	407	106
		Lowest value	—	2	0	0	4	4	5	2	2	10
C2	Curran Road	Average	93	89	84	83	54	44	47	46	52	53
		Highest value	—	720	456	452	412	339	268	343	269	136
		Lowest value	—	4	0	0	0	0	3	3	3	13
A2	Moorland Road	Average	79	73	64	56	54	32	36	43	63	52
		Highest value	—	536	508	400	484	216	255	387	293	150
		Lowest value	—	0	0	0	0	0	0	3	4	18
O1	Llanishen Reservoir	Average	40	33	31	27	21	19	16	15	14	23
		Highest value	—	220	202	201	168	138	94	172	98	53
		Lowest value	—	0	0	0	0	1	1	1	1	4
A1	Crofts Street	Average	—	96	76	82	65	54	55	53	59	51
		Highest value	—	438	381	512	440	298	295	271	257	118
		Lowest value	—	14	1	4	0	4	5	6	3	17
B3	Llanrumney Clinic	Average	—	39	42	41	32	30	30	28	35	28
		Highest value	—	289	193	219	222	248	165	174	140	76
		Lowest value	—	1	0	0	0	1	1	1	2	7

TABLE 3

Average, Highest and Lowest Values of Sulphur Dioxide Pollution 1961 – 1970
(microgrammes per cubic metre)

National Ref. No.			1961	1962	1963	1964	1965	1966	1967	1968	1969	1970
D1	City Hall	Average	61	69	70	69	66	67	60	99	119	107
		Highest value	—	298	375	283	375	325	267	375	316	223
		Lowest value	—	4	6	9	0	8	6	8	10	48
C2	Curran Road	Average	70	85	87	63	79	74	56	81	105	91
		Highest value	—	536	404	432	449	598	310	251	352	191
		Lowest value	—	6	3	0	0	0	0	0	11	38
A2	Moorland Road	Average	92	93	109	96	87	72	92	94	124	118
		Highest value	—	375	529	636	644	271	377	783	377	256
		Lowest value	—	12	0	0	0	0	0	0	0	48
O1	Llanishen Reservoir	Average	39	19	32	47	42	46	37	36	60	48
		Highest value	—	198	292	203	365	186	136	100	174	91
		Lowest value	—	0	0	0	0	6	0	0	0	21
A1	Crofts Street	Average	—	97	96	102	97	82	88	95	110	94
		Highest value	—	373	579	466	389	361	324	296	323	204
		Lowest value	—	4	0	16	8	9	14	21	22	48
B3	Llanrumney Clinic	Average	—	57	72	59	49	53	50	53	77	61
		Highest value	—	343	314	237	271	404	230	210	245	138
		Lowest value	—	0	7	0	0	0	0	0	6	25

Fig. 2. Cardiff: Smoke Pollution - Trend 1961-70.

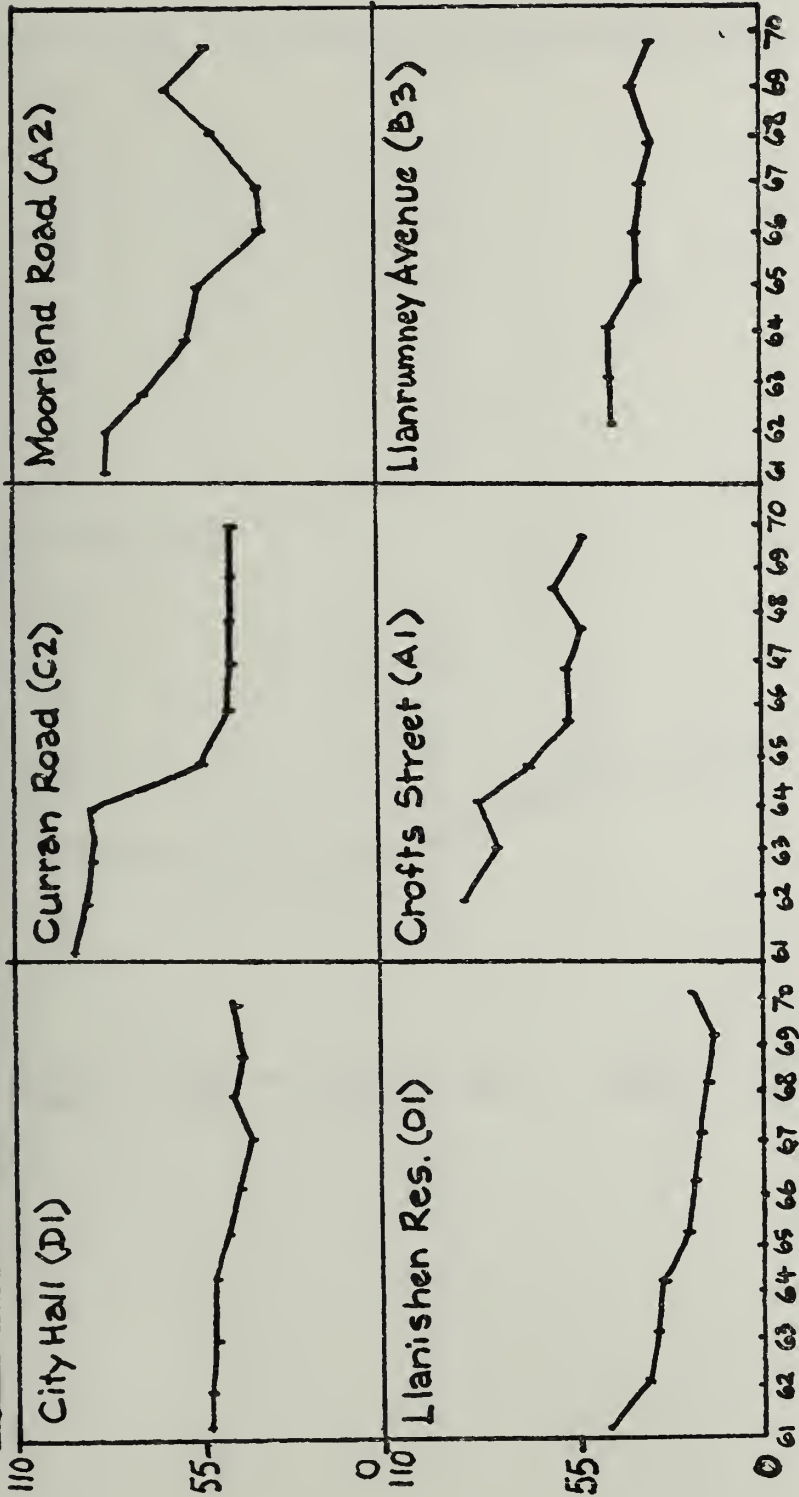


Fig.3. Average Smoke Concentrations - 1962 to 1970.

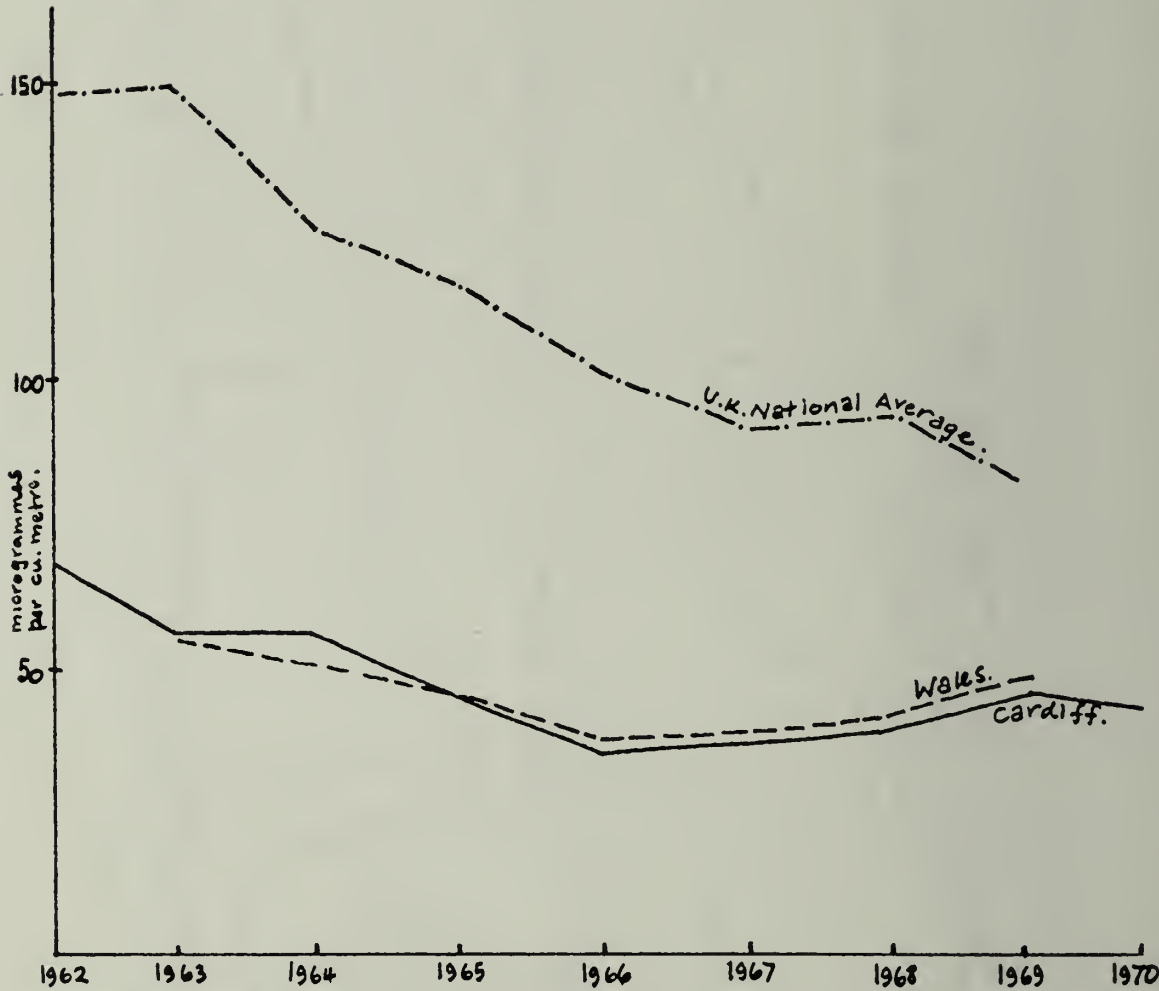


Fig 4. Cardiff: Pollution by Sulphur Dioxide 1961-1970

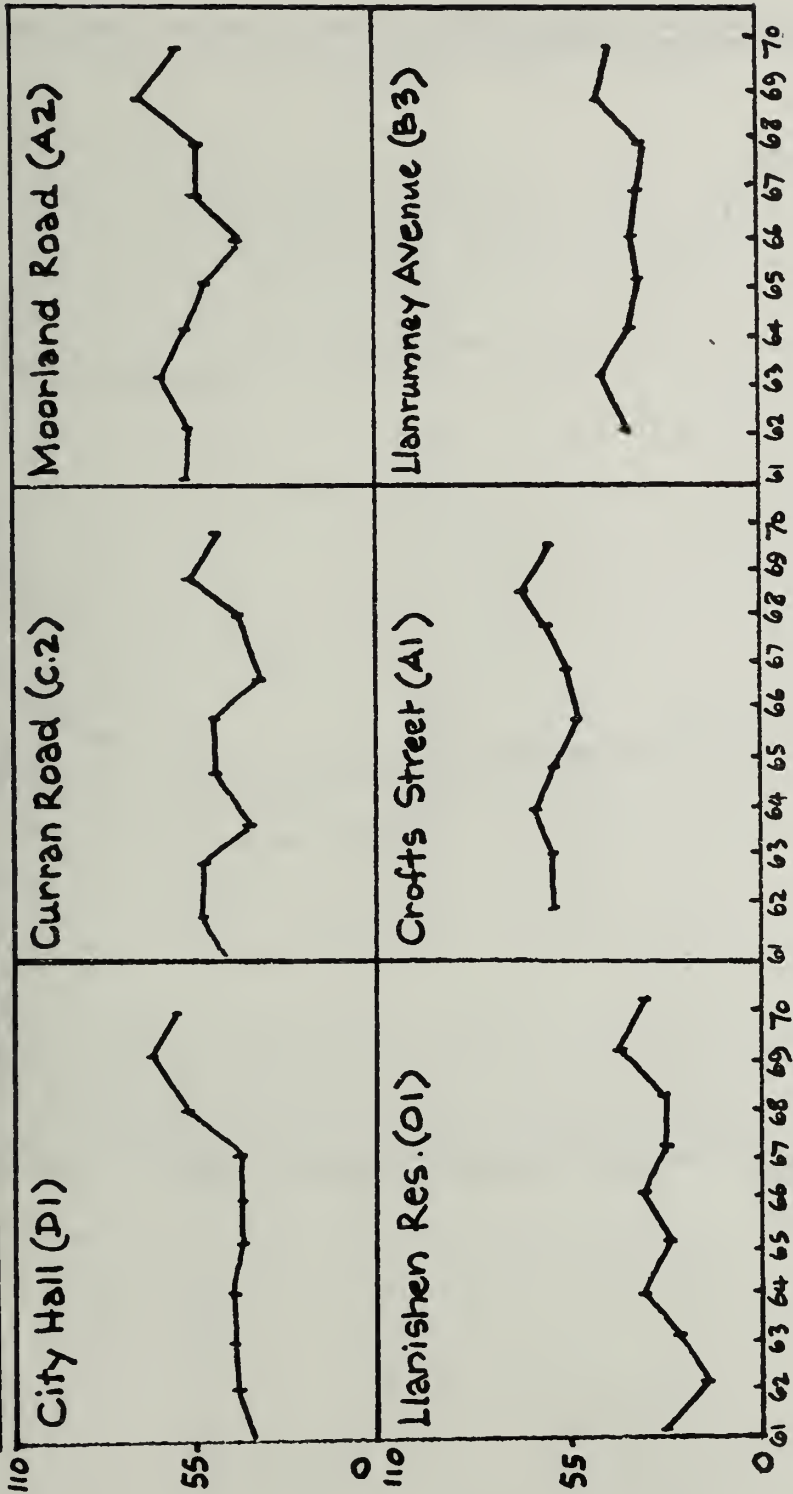
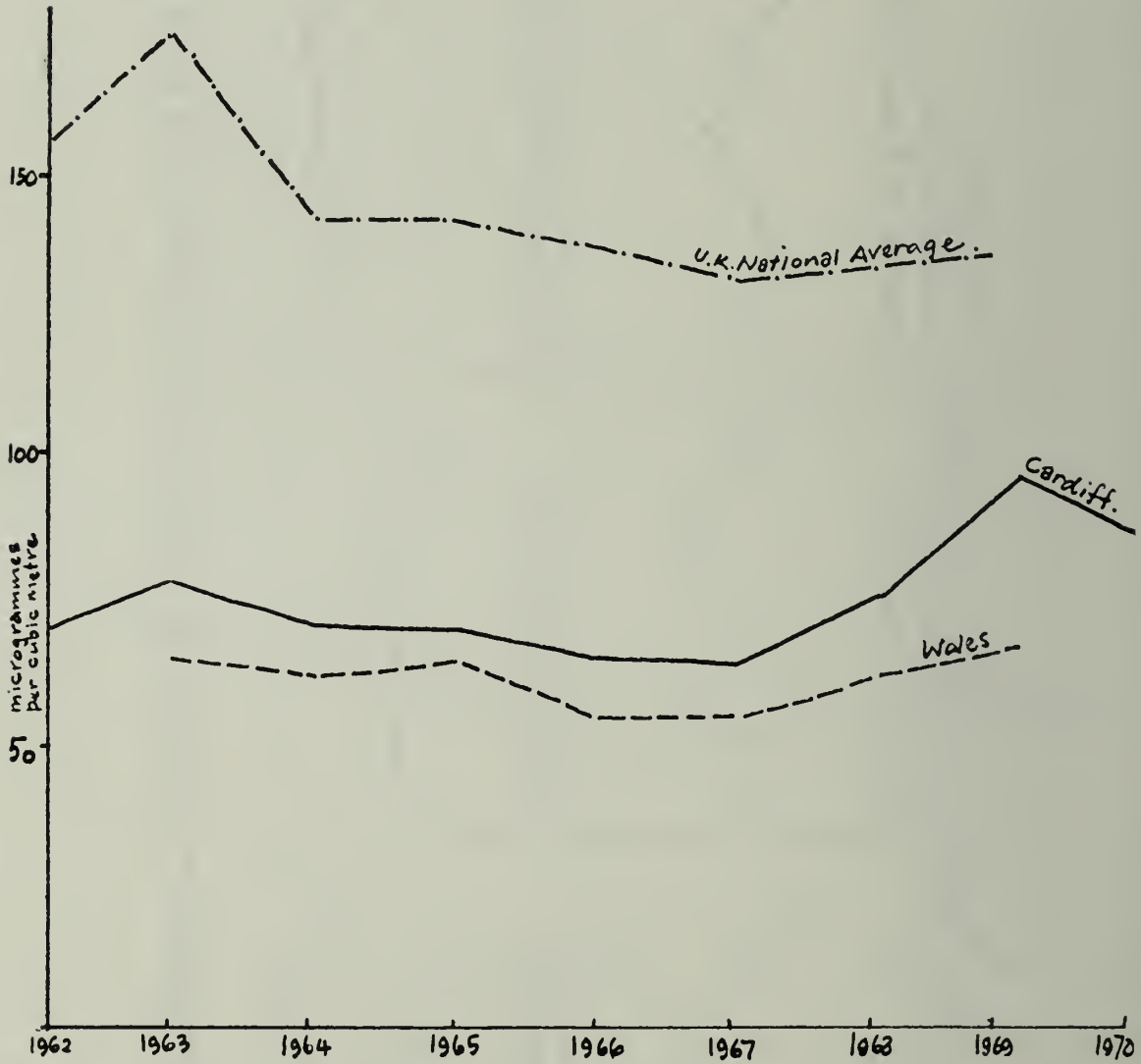


Fig.5. Average Sulphur Dioxide Concentration 1962-1970



Pollution by trace metals

These pollutants are generated into the atmosphere from special industries and motor vehicles. It was decided in August 1970 to carry out a limited investigation in order to gain a preliminary assessment of this particular aspect of air pollution in Cardiff.

(a) Trace Metals in the Air:

In order to gain preliminary information on the presence of metals in the atmosphere, examination was made of the daily filter papers collected previously from the established atmospheric pollution stations. Certain technical difficulties immediately demonstrated themselves and the results in respect of certain metals were not acceptable for obvious reasons. However, other acceptable results, together with a figure for industrial towns in the U.K. for purposes of comparison, were as follows:—

MAY 1970	COPPER	IRON	ARSENIC
A2 Moorland Road	less than 200	2,500	not detected
A1 Crofts Street	less than 200	800	not detected
B3 Llanrumney	less than 200	300	not detected
DECEMBER 1970			
A2 Moorland Road	less than 500	not examined	not examined
A1 Crofts Street	less than 500	not examined	not examined
B3 Llanrumney	less than 500	not examined	not examined
U.K. Industrial Towns 1956/58 ..	134	not available	86

(b) Lead in Street Air:

Since there is a strong association between this metal in the atmosphere and the use of tetraethyl lead and tetramethyl lead as additives to petrol, measurements were conducted from a special sampling point in Newport Road (A48) where heavy traffic conditions are frequent. Air was continually sampled and filtered from the pedestrian bridge, the filters being analysed by the City Analyst. It was not necessary to change filter papers more than twice in each month. The amounts of lead found to be present in the atmosphere were as follows.

August/September 1970	600 microgrammes per 1,000 cubic metres				
October 1970	300	"	"	"	"
November 1970	600	"	"	"	"
December 1970	860	"	"	"	"
January 1971	760	"	"	"	"
February 1971	650	"	"	"	"
March 1971	110	"	"	"	"
April 1971	360	"	"	"	"
Average of these measurements	505	"	"	"	"

These results may be compared with general figures quoted for various sites in the U.K. from measurements carried out in 1956/58:

Semi-rural sites	290 microgrammes/1,000 cubic metre
Industrial towns	980 „ „ „ „
Conurbation	735 „ „ „ „

Complaints

During the year 125 complaints were received about air pollution. This is twice the number received during the previous year.

More success this year was obtained in dealing with the troublesome complaints about the burning of garden refuse. When complaints of this kind were received, letters and enclosures were distributed to houses in the vicinity, giving alternative means of getting rid of the refuse and at the same time pointing out the harmful nature of the smoke produced by burning such refuse. The initial success justifies continuing the experiment.

Petitions were received from residents in connection with acidic smuts from a bakery and severe grit depositions from a paper factory and a brewery. Complaints were received of fumes from an iron foundry and smoke from a fuel briquetting plant. The problem from the briquetting plant was referred to the Alkali Inspector.

During the strike of the municipal manual workers a problem arose from fires continually being lit both accidentally and wantonly at the Local Authority's controlled refuse tips which necessitated the calling out of the Fire Brigade on numerous occasions.

Complaints were from the following sources:

Burning of garden refuse	16
Burning of refuse / shop and commercial premises ..	15
Smoke and/or grit – factory chimneys	36
Smoke from domestic chimneys	13
Smoke from controlled refuse tips	11
Dust from coal yards	3
Smoke from incinerators	6
Smoke from demolition sites	17
Smoke from burning of plastic covering of copper wire	2
Grit from hospital chimneys	1
Oil smutting	12

Routine Observation Visits, etc.:

Visits to industrial premises	203
Visits to commercial premises	48
Visits to domestic premises	102
Visits re prior approval	31
Visits to A/P measuring stations	521
Observations – formal	23
Observations – informal	226

Notifications and Prior Approval

Notifications of New Installations

Aggregate capacity of installation	No. of Boilers Fired By				Total Added Capacity B.T.U.'s/hr
	Coal	Oil	Gas	Total	
Hot Water Boilers 0-100,000	—	—	—	—	—
100,001-500,000	—	6	3	9	2,565,000
500,001-1,000,000	—	9	2	11	5,589,000
1,000,001 and over	—	9	1	10	30,130,000
Steam Boilers	—	6	—	6	13,525 lbs/Steam/hr
Total Notifications		36			
Total Prior Approvals		16			

One special case taken by the Local Authority was concerned with dust pollution from the British Railways College Road Coal Depot. The original information and preliminary notices had actually been served by the Cardiff Rural District Council, but due to various legal complications the case did not reach the courts until 1970. The action took place in the High Court of Justice, Queen's Bench Division, at Swansea on the 12th October 1970. After the preliminaries had been completed the judge recommended that the case should be taken out of his list in order to enable the parties to negotiate. After three days, the matter came again into the court when a Form of Agreement between Cardiff Corporation and British Railways was presented to the judge for his approval. The judge in accepting the agreement between the parties concerned stated that the case could be restored to the Judges List at any time until January 1972, should there be a breach of the undertaking by British Railways.

The effect of the undertaking is to limit the amount of coal stores in the depot, to limit the number of vehicles using the depot and to ensure that the depot is kept as clean as possible at all times. The following comprises a full list of the undertakings given by British Railways to the City Council:

1. No. 1 siding will not be used again for coal operations of any kind.
2. A line of empty box wagons to be kept in No. 1 siding as at present.
3. No. 2 siding will not be used again for coal operations of any kind.
4. Only No. 3 siding to be used for coaling operations.
5. The use of the road between Nos. 1 and 2 sidings to be prohibited to coal merchants vehicles. The Defendants will make every effort to restrict the use of vehicles upon the road so as to minimise the disturbance of any dust which may be upon the said road.
6. The Defendants will give notice forthwith closing the College Road Coal Depot as a public Coal Depot and will henceforth continue to licence only the six coal merchants already trading there. The Defendants undertake that if any of the said merchants remove or cease their business from or at the said Depot, no person will be granted a licence in their place, nor will the licences of the remaining merchants be extended to include the area vacated by the departing merchant. Further that no more than 10,000 tons of coal shall be delivered at the Depot in any calendar year.
7. The Defendants will prohibit the said coal merchants from bringing coal to the said Depot by road, other than returning coal bagged at the said Depot but remaining on a lorry unsold to the said Depot.
8. The Defendants undertake to limit the stacking of coal to one half being the southern half of the said area, and to a height not greater than 10 feet.

9. The Defendants undertake to purchase suitable and sufficient mechanical spraying equipment for the purpose of damping down any coal to be moved in any coal handling operation at the said Depot.
10. The Defendants undertake to ensure the daily removal from the road between No. 3 siding and the coal stacking area of any spillage on this road arising from any loading or unloading operation. The Defendants will ensure the removal of such spillage immediately after completion of such operations.
11. The Defendants will instruct a Yard Supervisor from their staff who shall be charged with securing observance of the above undertakings within the said Depot.

OFFICES, SHOPS AND RAILWAY PREMISES ACT 1963

This Act controls working conditions in offices, shops and other prescribed 'non-industrial' premises. It is enforced by a specialist division of the department under the control of a public health inspector who has been assisted during the year by two technical assistants.

Registration

During the year 201 additional premises were registered, but 133 were removed from the register, giving a net increase of 68 premises at the end of the year. Twenty-six of these premises, employing 3,160 staff are post office premises, transferred from the control of the Department of Employment when the post office became a public corporation. Of the remaining 175 newly registered premises only 23 did so voluntarily, the others being found unregistered in the course of routine inspections.

The following table gives details of all registered premises and compares the totals with previous years.

	No. of premises registered		No. of persons employed	No. of premises registered				
	during 1970	at 31.12.70		1965	1966	1967	1968	1969
Offices	86	1,739	23,653	1,941	1,789	1,738	1,668	1,669
Shops	64	1,818	10,139	1,606	1,669	1,807	1,799	1,841
Wholesale premises ..	13	349	2,899	401	353	348	337	345
Catering establishments and canteens ..	12	281	2,837	239	250	265	267	264
Totals ..	175	4,187	*39,528	4,187	4,061	4,158	4,071	4,119

*Males 18,700

Females 20,828

Inspections

The carrying out of general inspections of premises has continued at a slower pace this year, due to concentration of effort on the Hoist and Lift Regulations and other public health work. All premises inspected were in the city centre. They were:—

Offices	176
Shops	248
Wholesale premises	10
Catering establishments	55
	<hr/>
	489

Additionally 3,195 other visits were made, largely as a follow-up to notices served in 1969 and 1970, making a total of 3,684 visits of all kinds.

It is anticipated that during 1971 several technical assistants at present engaged on work connected with houses-in-multiple-occupation will be transferred to offices and shops inspection, thus considerably increasing the number of general inspections.

Operation of the general provisions of the Act

Notices drawing the attention to owners or occupiers to contraventions of the Act were served in 265 cases, representing 54% of premises inspected.

An analysis of the contraventions is set out in the following table.

Section	Contraventions	Number
4	Failure to keep premises clean – (a) rooms	42
	(b) common parts	2
5	Rooms overcrowded	4
6	Failure to maintain a reasonable temperature	3
	Appliances causing noxious fumes	—
	Failure to provide thermometers	62
7	Rooms not effectively ventilated	18
8	Failure to provide suitable and sufficient lighting	
	(a) rooms	—
	(b) common parts	2
	Failure to keep windows clean – (a) rooms	—
	(b) common parts	—
	Failure to maintain electrical apparatus	5
9	Failure to provide sufficient sanitary conveniences	9
	Failure to keep sanitary conveniences clean	40
	Failure to effectively light sanitary conveniences	16
	Failure to effectively ventilate sanitary conveniences	10
	Failure to properly screen sanitary conveniences	1
	Failure to provide door fastenings	7
	Failure to mark conveniences 'male' or 'female'	20
	Failure to provide means for disposal of sanitary dressings	11
	Failure to protect conveniences from the weather	—
	Fixtures and fittings in need of repair or renewal	21
	Floors in need of repair	2
	Conveniences obstructed by stock or goods, etc.	2
10	Failure to provide sufficient washing facilities	5
	Failure to keep washing facilities clean	16
	Failure to effectively light washing facilities	—
	Failure to effectively ventilate washing facilities	2
	Failure to provide a supply of hot running water	31
	Failure to provide a supply of soap and towels	—
	Fixtures and fittings in need of repair or renewal	9
	Floors in need of repair	2
	Facilities obstructed by stock, goods, etc.	1
12	Failure to provide accommodation for outdoor clothing	2
13	Failure to provide sufficient seats	—
15	Failure to provide facilities for eating meals	—
16	Failure to maintain floors and floor coverings in good repair	
	(a) rooms	18
	(b) common parts	12
	Failure to keep floors, etc., free of obstruction	—
	Failure to maintain staircases in good repair	8
	Failure to provide handrails	31
	Failure to fence openings in floors	—
17	Failure to effectively fence machinery	5
24	Failure to provide a suitable first aid box	111
50	Failure to display an abstract of the Act	114
49	Failure to register premises	152

Exemptions

No further applications for exemptions were received during the year. One exemption (section 9 – sanitary conveniences) remains in operation.

Accidents

One hundred and thirty-nine accidents, involving the loss of three or more days work, were notified during 1970. Details of the type of premises where these accidents occurred, their causes and the injuries sustained, are set out in the following table:—

Accidents	Class of Premises				
	Offices	Shops	Warehouses	Catering establishments and canteens	Total
No. of accidents notified	33	65	19	22	139
No. investigated	5	19	2	6	32
Action taken					
Prosecution	—	—	—	—	—
Formal warning	1	5	—	1	7
Informal advice	3	11	2	3	19
None	1	3	—	2	6
Causes of Accidents					
Machinery	—	4	—	1	5
Transport	2	—	—	—	2
Fire and explosion	—	—	—	—	—
Electrical	2	—	—	—	2
Hand tools	—	4	—	1	5
Falls of persons	11	27	1	14	53
Stepping on or striking against object or person	8	6	6	2	22
Handling goods	7	11	3	1	22
Struck by falling object	2	13	9	3	27
Not otherwise specified	1	—	—	—	1
Injuries sustained					
Fractures and dislocations	2	13	4	5	24
Sprains and strains	16	18	1	4	39
Internal injury	—	—	—	—	—
Amputation	—	1	—	—	1
Open wounds and surface injury	1	16	4	3	24
Bruising, crushing, concussion	11	16	8	5	40
Foreign body in orifice	—	—	—	—	—
Burns	2	—	1	4	7
Poisoning	—	—	—	—	—
Multiple injuries	1	1	1	1	4
Other injuries	—	—	—	—	—

Lift and Hoist Regulations

A further 200 lifts have been inspected during the year, and an analysis of the conditions found is set out below.

	1. Passenger/goods lifts available for public use	2. Passenger/goods lifts available for staff only	3. Goods lifts (usually incapable of carrying passengers)
No. of lifts inspected	61	52	87
No. found to be satisfactory ..	22	12	19
No. lacking evidence of inspection by lift engineer but otherwise satisfactory	26	9	22
No. lacking evidence of inspection and having faults	6	14	28
No. having faults only	12	17	18

Faults noted on inspection are placed in two categories – improvements required to comply with the regulations, and defects in existing equipment. The following faults were noted.

	Repair	Improvement
Gates (landing and car) ..	37	17
Lift car	43	38
Liftway	25	26
Control gear	19	12
Motor room	12	18

Legal Proceedings

It was found necessary to institute legal proceedings in only one instance during the year. The company concerned was served with four summonses alleging contravention of sections 4(1) (dirty condition of an office), 6(4) (failure to provide a thermometer), 24(1) (failure to provide a first aid box) and 50(4) (failure to display an abstract of the Act). All charges were proved and a total fine of £12 (£3 on each summons) was imposed, and £12 costs were awarded to the Council.

Comments

1. General provisions of the Act

There has been little to comment upon during the year. As will be seen from the analysis of contraventions on previous pages, of nearly 800 items, nearly 45% were concerned with minor items such as the provision of thermometers, the failure to display abstracts, marking of sanitary conveniences and the failure to register premises.

Difficulties have again been encountered in dealing with premises in a poor state of decoration and it is disappointing to feel that after over six years experience in enforcement, it has not yet been thought fit to introduce a requirement to maintain a minimum standard into the Act. This would surely be a considerable step in achieving a marked improvement in working conditions.

In general, contraventions tend to fall into the classification of 'maintenance' and it is only in newly-occupied premises that a lack of basic amenities is to be found.

It is extremely disappointing to note that only 23 registration forms were submitted voluntarily during the year, particularly as a considerable number of the 175 occupiers of newly-registered premises had previously been registered at other addresses.

Of the 139 accidents reported, only nine were notified by employers who have premises solely within the city. All of the remainder were notified by large companies with many premises, and one finds it extremely difficult to believe that these are the only premises in which accidents occur.

2. Lifts and Hoists

The inspection of the lifts has occupied a considerable amount of time during the year. The number inspected (200), does not give a true reflection of the work involved. The inspection of a lift and its subsequent upgrading to comply with the regulations has meant, in a great number of cases, many visits and telephone calls to bring together the occupiers of premises, lift engineers and insurance inspectors. The regulations provide for exemptions from various requirements for various categories of appliances and considerable difficulty has been encountered in deciding if a particular appliance may or may not claim exemption, when the appliance does not exactly match the description in the schedule to the regulations.

Many occupiers are reluctant to spend money on what appears to them to be a perfectly adequate machine and this can be readily appreciated when it is realised that spending amounts of £1,000 and more to enclose a liftway is not uncommon. Several lifts have been reconstructed to such an extent that they can no longer claim the partial exemptions from regulations 7 and 9.

It is now standard practice to ask for counterbalance weights in lift shafts to be guarded, but in several cases it has been found that there is insufficient clearance between the counterbalance and the lift car for a guard to be fitted.

In several cases where liftways have been enclosed, it has been necessary to ask for improved lighting on the adjoining staircase when the enclosure is of solid construction.

Most passenger lifts have means of hand winding in case of breakdown, but it is unusual to find any person on the premises with sufficient knowledge to operate the lift in emergencies. It is suggested that a scheme similar to the 'Trained first-aider' be introduced to overcome this failing.

FACTORIES ACT 1961

Inspection of factories has now been integrated with inspection under the Offices, Shops and Railway Premises Act, and premises are visited in a two year cycle. In view of the large number of inspections carried out during the previous year - 423 - only 37 premises were visited this year.

1. INSPECTIONS for purposes of provisions as to health

PREMISES (1)	Number on Register (2)	Number of		
		Inspections (3)	Written notices (4)	Occupiers prosecuted (5)
(i) Factories in which Sections 1, 2, 3, 4 and 6 are to be enforced by Local Authorities ..	8	Nil	Nil	Nil
(ii) Factories not included in (i) in which Section 7 is enforced by the Local Authority ..	984	37	6	Nil
(iii) Other Premises in which Section 7 is enforced by the Local Authority (excluding out-workers' premises)	7	Nil	Nil	Nil
TOTAL	999	37	6	Nil

2. Cases in which DEFECTS were found

PARTICULARS (1)	Number of cases in which defects were found				Number of cases in which prosecutions were instituted (6)
	Found (2)	Remedied (3)	Referred to H.M. Inspector (4)	Referred by H.M. Inspector (5)	
Want of cleanliness (S.1)	—	—	—	—	—
Overcrowding (S.2)	—	—	—	—	—
Unreasonable temperature (S.3)	—	—	—	—	—
Ineffective drainage of floors (S.6)	—	—	—	—	—
Sanitary Conveniences (S.7)					
(a) Insufficient	1	1	—	—	—
(b) Unsuitable or defective	7	7	—	—	—
(c) Not separate for sexes	—	—	—	—	—
TOTAL	8	8	—	—	—

3. Outworkers

NATURE OF WORK (1)	SECTION 133			SECTION 134		
	No. of out-workers in August list required by Section 131(1) (c) (2)	No. of cases of default in sending lists to the Council (3)	No. of prosecutions for failure to supply lists (4)	No. of instances of work in un-wholesome premises (5)	Notices served (6)	Prosecutions (7)
Textile weaving	7	—	—	—	—	—
TOTAL	7	—	—	—	—	—

RODENT CONTROL

Six rodent operatives are employed under the control of a rodent officer.

Sewer Maintenance

In January, March, April, November and December 1970, 65 districts in and around the city including Whitchurch and Rhiwbina, with a total of 4,727 manholes were all treated with fluoracetamide.

Local Authority Premises

These include public works yards, workshops, bus depots, schools, parks, baths, Law Courts, the City Hall and each of the refuse tips within the city. All have been treated during the year, in some cases as many as four times.

Maintenance of Business Premises

During the year the Corporation undertook to maintain treatments at various intervals for 348 business premises which include: cafes, food stores, shops, warehouses, cinemas, bingo halls, clubs, offices, bakehouses, hotels, garages, banks, Central Market, engineering

works and steel mills, building sites, a farm, bus depots, refuse tips and cleansing depots. This is six fewer than last year. Contracts ranged from £2.50 to £100.00 and the total income amounted to £4,094. Single treatments for 461 business premises were also carried out for the sum of £1,234. Thus the total income from business premises was £5,328, being £99.00 less than in 1969.

Of the 809 premises which were treated, 583 were for mice, 123 for rats and 80 for rats and mice. 26 were free from rats or mice. The bodies of 2,183 mice and 129 rats were removed by the operatives during and after treatments.

The poisons used were 10% of No. 5 Warfarin with medium oatmeal base for rats and Alpha Chloralose (which proved reasonably successful) for mice.

Private Dwellings

A free service is given to domestic premises and during the year 2,147 complaints were received and investigated (376 fewer than 1969). In all 608 premises were dealt with for rats (mostly for rats which had been seen outside the premises and many for the same infestation), 909 for mice (243 less than 1969). In 156 instances treatment proved there was no infestation. In the case of the remaining 474 complaints, initial survey failed to establish the existence of any infestation, the complaints often having been due to a single rat having been seen in the vicinity. Other complaints often arose out of fear that a neglected piece of land nearby might become infested.

Eighty-seven suspect drains (one fewer than last year) were reported by the operatives; the majority proved to be defective on being tested.

Schools

During the year 112 complaints were received from 60 schools, 101 for mice (mostly in school kitchens) 9 for rats.

Pigeons

Three complaints were received but on investigation it was not found necessary to take official action.

Analysis of Surface Infestations

The surface infestations traced during the year are analysed on the following tabulation prescribed by the Ministry of Agriculture, Fisheries and Food. The terms in the tabulation have the meanings assigned to them by that Ministry's form I.R. 31.

PROPERTIES OTHER THAN SEWERS	TYPE OF PROPERTY	
	Non-Agricultural	Agricultural
1. Number of properties in district	100,750	54
2. (a) Total number of properties (including nearby premises) inspected following notification	15,387*	—
(b) Number infested by (i) rats	743	—
(ii) mice	1,400	—
3. (a) Total number of properties inspected for rats and/or mice for reasons other than notification	348	—
(b) Number infested by (i) rats	139	—
(ii) mice	928	—

*Included in this figure are 11,070 food hygiene visits by public health inspectors.

NOISE ABATEMENT

78 complaints were received during the year, a 50 % increase on last year which may well reflect an increasing awareness on the part of the public that noise need not be tolerated. At the time of writing it is apparent that this trend is continuing.

In addition to the investigation of specific complaints, several surveys were carried out. These were directed at ascertaining noise levels from road traffic in various areas of the city, the correlation with alterations in traffic flows, composition, speed, the effect of gradients, etc. It is hoped that the data evaluated from these surveys will be of considerable assistance in reducing noise nuisance when certain new roads planned for Cardiff have been constructed.

Other surveys have had as their object the measurement of noise levels from selected industrial premises to build up a noise index with a view to providing a yardstick to assess whether a future proposed new factory would be likely to give rise to a noise nuisance to the neighbourhood, having regard to the constructional design. This programme will be continued in 1971.

On several occasions advice has been given on acoustics and noise reduction for persons compelled to work in close proximity to extremely noisy machinery.

The sources of the noise complaints were found to be:

Domestic

Noisy neighbours (musical instruments, record players, radios, etc.)	..	..	..	..	9
Miscellaneous complaints	..	..	..	..	5

Commercial

Road vehicle noise	..	..	..	..	6
Vehicle repairs	..	..	..	..	6
Fan noise and ventilation systems			..	..	2
Refrigeration plant	..	..	..	..	3
Pop groups and clubs	..	..	..	..	10
Noisy milk delivery	..	..	..	..	2
Ice cream chimes	..	..	..	..	3

Industrial Noise

Machinery	..	..	..	..	..	16
Pile driving	..	..	..	..	..	1
Compressors	..	..	..	..	..	1
Pneumatic drilling	..	..	..	..	..	6
General construction work			..	..	..	2
Railway wagon repairs	..	..	..	..	..	3
Transformers	..	..	..	..	..	1
Stationary engines	..	..	..	..	..	2

Following investigation of the above complaints, 44 were considered worthy of confirmation as noise nuisances.

Advice from the inspectorate was readily accepted, in general, by the persons causing the nuisance and the appropriate remedial action taken to eliminate or reduce the noise to an acceptable level. No prosecutions were instituted and in only one case was it found necessary to issue an abatement notice.

191 inspections and 1,097 revisits were made in the course of investigation, a high proportion of which had to be carried out at night. 206 visits were made to selected sampling points in connection with the special surveys.

GENERAL ENVIRONMENTAL HYGIENE

Complaints and inspections

4,231 complaints were received by the department during the year. In addition the district inspectors received 835 complaints in the course of their work. 6,554 revisits were made in dealing with the above complaints together with 26,500 other visits and interviews, details of which are given in other sections.

Drains and Sewers

The sewage disposal system of the city has been reasonably satisfactory, although as in previous years there has been growth in both private and local authority building sectors. The eastern area sewerage scheme completed last year will allow further considerable expansion. The comminuting and screening sections of the Penarth Road pumping station was completed; thus all sewage from the western section of the city is now thoroughly comminuted before discharge to sea. No other major works were started during the year but the programme of routine repair and maintenance has been carried on together with minor improvements to existing sewers.

3,642 visits were made by the district public health inspectors in connection with drainage trouble; 41 drains were partially reconstructed and 3 entirely so. In 120 instances, minor repairs were effected. 115 drains were cleared of blockages by occupiers and owners and 844 were cleared by the Corporation sewermen. 854 drain tests were carried out by means of colour, smoke and other means. 103 of these tests were carried out following reports from the rodent control section. 8 water samples were taken for chemical analysis during the course of investigations into drainage trouble.

WATER SUPPLY

Water Purity

Cardiff Corporation Waterworks Department provides domestic water supplies to 86,353 dwelling houses with a population of 284,010 within the city boundary. All house supplies are piped direct from the water mains; there are no standpipes for communal domestic use. The supply has been satisfactory in both quality and quantity. In the routine sampling programme 1,657 bacteriological samples were taken by the Water Department of which 1,137 were from the distribution system, and 520 from raw water sources at Llandegfedd, Cantref and Llwynon reservoirs.

1,214 chemical samples were also taken of which 498 were from the distribution system and 716 from raw water at the treatment works. Many chemical samples were unsatisfactory in some respect, e.g. in the amount of iron or manganese present but all were considered safe and suitable as drinking water. In addition, 151 bacteriological and 30 chemical samples were taken at random from households, schools and food premises by public health inspectors. 6 bacteriological samples were unsatisfactory but immediate follow-up samples proved satisfactory. 5 chemical and 5 bacteriological samples were also taken by public health inspectors from 2 wells used by a mineral water factory and a dairy; all were satisfactory.

The Water Engineer states that 12,482 yards of cast iron mains were foam swabbed in Whitchurch and Birchgrove Areas. Where repair works have been carried out chlorination dosages are increased temporarily until follow-up samples prove satisfactory.

No special projects of any significance were carried out during the year.

Fluoride Content

No analysis was made of the fluoride content but the content is known to be negligible. The City Analyst reported the fluoride content of the various supplies in 1965 to be as follows:—

	Fluoride content in parts per million			
Llandegfedd treated water (Croft Street)	0.070
Cantref mixed filtered water	0.030
Llwynon mixed filtered water	0.030

Plumbo solvency

There is no apparent plumbo solvency problem. The raw water at Cantref and Llwynon reservoirs tends to be plumbo solvent but remedial action is taken by reducing the amount of suspended organic matter by coagulation and filtration and raising the ph value by the addition of lime.

SWIMMING BATHS

There are 8 local authority swimming baths, 2 of which are specially designed for hydrotherapy work with handicapped children; in addition 2 children's paddling pools are provided in public parks. One private girls school swimming bath and a factory pool are also visited for sampling purposes by the department.

Field tests for chlorine content were carried out on 188 occasions; 268 bacteriological and 7 chemical samples were taken for examination. 15 of the bacteriological samples were unsatisfactory, the majority of these being from the 2 paddling pools, and occurring during hot weather when the pools were overcrowded. Of the 7 chemical samples, one was found to be of poor organic quality. This was in one of the special schools and was remedied by completely renewing the water with fresh mains water.

No complaints were received during the year concerning the condition of any of the local authority pools.

A description of each bath is given in the following table:—

Address	Description	Source of water used for filling	Method of Treatment	Frequency of water changing
Guildford Crescent (Mixed) (enclosed)	75' x 27' x 6' 60,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Male	60' x 22' x 6' (2' 9") 30,000 gallons			
Female	50' x 22' x 6' (2' 9") 30,000 gallons			
Empire Pool (Mixed) (enclosed)	165' x 60' x 16' (3') 636,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Llandaff Fields (Open-air, Mixed)	150' x 90' x 6' 10" (1' 8") 500,000 gallons	Mains Water	Filtration and continuous chlorination	Ten-hourly circulation
Splott (Open-air, Mixed)	100' x 30' x 6' (2') 100,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Howells School (Girls) (enclosed)	70' x 30' x 8' (2' 6") 65,000 gallons	Mains Water	Filtration and continuous chlorination	Eight-hourly circulation
Ely Paper Mills Factory (Open-air, Mixed)	80' x 25' x 6' (4') 62,500 gallons	Mains Water	Chlorinated by hand (Hypochlorites)	Emptied and refilled weekly
Glan-y-Nant School (enclosed)	64' x 22' x 8' 6" (3') 49,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Greenhill Special School (enclosed)	17' x 23' x 4' 6" (2' 6") 12,000 gallons	Mains Water	Filtration and semi-automatic	Four-hourly circulation
Fitzalan Technical School (enclosed)	66' x 24' x 3' 3" (8' 6") 57,000 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation
Ty Gwyn Junior Training Centre (enclosed)	12' x 5' x 3' 1,125 gallons	Mains Water	Filtration and continuous chlorination	Four-hourly circulation

Swimming Baths: Bacteriological Examination

BATH	No. of Samples	Coliform bacilli per 100 ml.	Faecal coli per 100 ml.
Guildford Crescent	117 2 1	0 2 18+	0 0 18+
Empire Pool	74	0	0
Llandaff Fields Open Air (Mixed)	9	0	0
Llandaff Fields Paddling Pool ..	6 2 1	0 18+ 16	0 18+ 9
Splott Open Air	16	0	0
Howells School	3	0	0
Ely Paper Mills	1	0	0
Glan-y-Nant School	5 1 1	0 1 1	0 1 0
Greenhill Special School	4	0	0
Fitzalan Technical High School ..	12	0	0
Ty Gwyn Junior Training Centre	1	0	0
Victoria Park Paddling Pool ..	5 2 1 1 1 1 1	0 18+ 3 16 16 9 18	0 18+ 2 0 2 3 9

Refuse Collection

The Engineer and Surveyor reports that the daily collection of refuse from commercial premises was consolidated during the year as a night service. An incentive bonus scheme based on Work Study was introduced into the whole of refuse collection activity providing a substantial increase in the earning ability for the employees involved. As a result of these factors and also the purchase of further modern large capacity continuous loading vehicles as part of the vehicle replacement programme the number of manual refuse collection rounds, excluding bulk container vehicles, was reduced from 41 to 33.

The national official strike on the 5th of October caused the withdrawal of all collection services, but plastic refuse sacks were issued from 56 distribution centres and these were accepted when full at 24 reception centres as well as the refuse tips. Arrangements were made with contractors to control the tips as necessary and to clear the accumulation of full sacks from the depots before they became a health hazard. During the period of the strike 456,300 sacks were distributed.

Due to staffing difficulties the inspection of dustbins was somewhat limited during the year but the Dustbin Inspector surveyed 38 streets and issued 64 ten-day notices for the renewal of defective dustbins.

On the 21st of December a pilot scheme using plastic bin liners was introduced on one refuse collection round servicing approximately 5,000 properties in the eastern part of the city and this is being compared with the pilot scheme using dustless plastic dustbins which is in operation on the new Llanedeyrn housing estate.

Refuse Disposal

Hailey Park refuse tip was completed in July 1970 since which all refuse has been diverted to the remaining tips at Leckwith Moors and Llanedeyrn.

Civic Amenities Act

Facilities were maintained under the Civic Amenities Act whereby residents can dispose of bulky items of refuse without charge at the four district cleansing depots and these facilities have been regularly advertised in the local press.

Seventy-nine unwanted cars were accepted from the public, without charge, on behalf of the Corporation by Slag Reduction Company Ltd., Rover Way, and 77 abandoned vehicles were collected from the city streets by the Corporation's contractor, Thompson Metals Ltd. of Barry Dock, who also accept unwanted cars at their works.

Infectious Diseases – Epidemiological Enquiries

A full report on the incidence of infectious and other diseases appears on page 00 in the section 'Notifiable Diseases'. Investigations into the epidemiology of infectious diseases together with sampling for bacteriological and chemical examination are carried out by a senior specialist public health inspector.

Visits made in connection with infectious diseases were as follows:

Food poisoning	..	..	..	..	..	..	152
Dysentery	..	..	..	..	..	..	65
Smallpox contacts							
(surveillance from infected areas abroad)	..	..					54
Paratyphoid and Typhoid fevers	..	..					40
Malaria	..	..	..	..	..	..	2
Salmonella organisms (re routine sampling)	..	..					45
Infective Hepatitis	..	..	..	..	..	..	334
Children's and Welfare Homes	..	..					12
Miscellaneous	..	..	..	..	..	..	20

Verminous Premises, etc.

Verminous premises – inspections re –							
Bed Bugs	..	..	..	..	..	..	291
Cockroaches	..	..	..	..	..	..	89
Fleas	..	..	..	..	..	..	83
Ants	..	..	..	..	..	..	52
Flies	..	..	..	..	..	..	18
Spider Beetles	..	..	..	..	..	..	6
Carpet Beetles	..	..	..	..	..	..	3
Clover Mites	..	..	..	..	..	..	6
Wood Lice	..	..	..	..	..	..	3
Woodworm	..	..	..	..	..	..	5
Book Lice	..	..	..	..	..	..	3
Bird Lice	..	..	..	..	..	..	1
House Mite	..	..	..	..	..	..	8
Wharfborers	..	..	..	..	..	..	3
Mosquitoes	..	..	..	..	..	..	2
Scabies	..	..	..	..	..	..	15
Pediculosis	..	..	..	..	..	..	8
Miscellaneous	..	..	..	..	..	..	24
TOTAL	..	..	..	..	..	..	620

Disinfestation treatments

In addition to giving advice on the appropriate methods of control, the department provides a disinfestation service for premises owned by the council and on a recoverable account basis for privately owned houses, business premises, etc.

Treatments in 1970 were as follows:

Council houses	..	..	..	..	..	..	370
Other local authority premises	..	..	..	..	..	..	57
Recoverable accounts	..	..	..	..	..	..	115
Miscellaneous	..	..	..	..	..	..	16
TOTAL							558

Rhymney River Survey

During July a survey was initiated to investigate the bacterial flora present in the Rhymney River. Regular visits were made to selected sampling points along the course of the river extending from Newport Road bridge upstream to the Ystradyfodwg and Ponty sewer bridge. Samples of silt were taken from the river bank in addition to bacteriological water samples. Sewer swabs were also suspended within the main flow of the river and left for varying periods.

All samples were submitted to the Public Health Laboratory service, emphasis being placed on the identification of salmonellae type organisms. The survey is still continuing; present results show the presence of a number of salmonellae types in both water and silt.

CARAVANS

Licensed sites

There are three authorised sites within the city. Two of them are private residential sites and the third is a holiday site owned and administered by the Corporation, ideally placed in Pontcanna Fields in the heart of the city. One of the two private sites is a single caravan occupied by an agricultural worker. The other, at Culverhouse Cross, is a large, well run site accommodating 135 caravans.

The Corporation holiday site has received praise in caravan publications and several rallies have been held there by caravan organisations. During the year 1,872 caravans visited, totalling 5,660 caravan nights. No complaints were received from caravanners; 60 visits were made by the district inspectors.

Unlicensed sites

These have continued, as in previous years, to be a source of frustration to the district inspectorate. I reported last year that one large gypsy site on Penarth Road had defeated the efforts of the department to shift the occupiers or to substantially improve the sanitary habits of the gypsies and conditions on the site. The story still holds true. 20 of the caravan occupiers were prosecuted for lack of a sanitary convenience, accumulations of rubbish and for lack of a suitable bin. The magistrates directed the gypsies to comply with the nuisance notices which had a temporary effect in that a number provided chemical closets and the site was cleared of the worst accumulations of rubbish. In a short while, however, the site reverted to its previous condition despite the efforts of the district inspector.

Another continuing problem is the large private site, referred to in previous years, which has been the subject of numerous prosecutions both for lack of a site licence and for failure to comply with site licence conditions culminating in the withdrawal of the site licence. The owner has subsequently obtained indefinite planning permission by appeal to the Minister of Housing and Local Government. The unsatisfactory legal position leads one to the conclusion that this problem may persist indefinitely.

The provision of a permanent site for gypsies, as required by the Caravan Sites Act 1968, is still under discussion by the Council. Two positions have been considered; both have met with opposition but it is inevitable that a site must be provided to meet the urgent need.

Caravans: legal proceedings

Defendant	Offence	
3-22	Failing to provide proper sanitary accommodation, accumulation of rubbish, lack of a suitable bin for the reception of household refuse contrary to Section 268 of the Public Health Act 1936.	Dismissed on legal technicality. Magistrates however directed all the defendants to comply with the Nuisance Notices.
31	Did permit land to be used as a caravan site without a site licence contrary to Section 1 of the Caravan Sites and Control of Development Act 1960.	Case withdrawn, caravans removed before hearing.
40	Did permit land to be used as a caravan site without a site licence contrary to Section 1 of the Caravan Sites and Control of Development Act 1960.	Case withdrawn, site licence application made in proper form.

Lodging houses

Eleven applications were received from keepers of seamen's lodging houses for renewal of their annual licences. No new licences were issued. Frequent inspections were made to ensure that the high standards were maintained.

Keeping of animals and pet shops

Thirteen applications were received during the year. In each case an inspection was made and all the applications were approved.

Knackers yard and offensive trades

There is one knackers yard in the city subject to an annual licence. One offensive trade is carried out at premises carrying on the business of tripe boilers. Twenty-five visits during the year were made and the premises were found to be satisfactory on each occasion.

Pharmacy and poisons Acts

Licences were renewed in respect of 95 premises and 5 licences were issued to new premises.

Hairdressers

Three applications for registration under the Cardiff Corporation Act 1961, were received during the year. 305 premises are now registered and regular inspections were made to ensure that the provisions of the By-Laws were complied with.

Rag Flock, Fertilisers and Feeding Stuffs

One sample of synthetic fibre and one of new cotton felt was submitted for examination. Both samples were found to conform to the prescribed standard.

Fertilisers and Feeding Stuffs Act, 1926

NUMBER OF SAMPLES SUBMITTED FOR ANALYSIS	RESULTS OF EXAMINATION	
	ANALYSIS	
	Satisfactory	Unsatisfactory
Fertiliser	9	1
Feeding Stuffs	24	5

One sample of compound fertiliser was found to contain one ingredient in a quantity in excess of that stated and outside the limit of variation permitted by regulations. Having regard to the nature of the irregularity, the sale of the product was not to the prejudice of the purchaser and no official action was necessary. Two samples of compound feeding stuff contained 1% and 0.1% protein above the upper limit of permitted variation. The manufacturers were informed but no formal action was necessary since the excess was not considered to be to the prejudice of the purchaser.

A sample of dairy pellets was reported as being marginally deficient of oil, i.e., 0.1% below the lower limit of variation permitted. A further sample was also unsatisfactory. The formulation of the product has now been amended to ensure that the statutory declaration conforms with the ingredients. Another sample contained 80 p.p.m. copper, the presence of which had not been declared. Investigations showed that it was not the Company's practice to include copper as an ingredient of the product and that contamination of the ingredients had taken place during the compounding process. This appears to have been brought about by processing the product immediately following the mixing of another product of which copper was an ingredient.

Public conveniences

162 inspections were made during the year resulting in references about defects of repair or cleanliness. Vandalism continued to be a problem and it was decided to close 4 conveniences since changing public needs had rendered them unnecessary.

Health Education

In addition to the daily routine work on food hygiene, lectures were given to student health visitors, student midwives, staff of a catering organisation, young wives' clubs, old age pensioners, domestic science courses at schools, school meals service personnel, youth clubs and industrial workers.

A food hygiene exhibition was held in the Municipal Offices lecture room for the benefit of immigrant restaurant workers. This was well attended and certain restaurant owners acted as interpreters to assist the two district inspectors who lectured at the exhibition.

Places of Public Entertainment

12 visits of inspection were made to cinemas and theatres; three to places of outdoor entertainment and 10 to others.

Three notices were served to renovate decoration and cleanse premises.

New Buildings and alterations

By arrangement with the City Engineer and Surveyor plans submitted for building regulation approval are examined by the public health inspectorate in relation to the requirements of the Food Hygiene Regulations, Factories Act, the Offices, Shops and Railway Premises Act, etc. Recommendations were made in respect of 455 plans.

FOOD AND DRUGS CONTROL

Food Inspection

Each district public health inspector is responsible for food inspection at shops and warehouses in his area. Containerisation of imported food has continued to be an important section of food inspection, although there was a reduction in the numbers of Irish bacon sides and pig carcasses imported. The approximate weight of diseased or unsound food surrendered as unfit for human consumption and disposed of at the Corporation tips amounted to 162.6 tons. Of this, 150 tons were derived from the Bessemer Road fruit and vegetable market.

One specialist public health inspector carries out the Food and Drugs sampling work in the department.

Food Inspection and Sampling Visits

Condemnation Visits	..	..	..	..	1,039
Food Inspection Routine Visits	..	..	..	..	1,212
Sampling and Observation Visits	..	..	..	..	3,548

Imported Food Regulations 1968: Containerisation

1,212 routine food inspections were made by the district inspectorate in connection with the inspection of container consignments, a reduction of 336 visits on last year. Arrangements for inspection are working more smoothly. Little condemnation was found necessary. Five to ten per cent inspections were made in the majority of consignments; complete consignments were inspected in a number of instances. Meat was transferred to Cardiff in containers from the following ports:—

Port	Irish beef qrs.	Irish bacon sides	Irish pigs	Irish lambs	Danish bacon sides
Newport	5,024	520	1,275	972	
Liverpool	5,020	—	—	150	
Fishguard	4,349	31,610	2,415	444	—
Preston	3,073	6,520	35	—	—
Cardiff	742	—	1,853	25	
Swansea	132	—	303	—	—
Bristol/Avonmouth ..	—	860	—	60	—
Harwich	—	1,256	—	—	20,474
Grimsby	—	—	—	—	247,396
TOTAL ..	18,340	40,766	5,881	1,651	267,870

Method of transport

	Road	Rail	Total
Irish beef	13,920 qrs.	4,420 qrs.	18,340 qrs.
Irish bacon	9,156 sides	31,610 sides	40,766 sides
Irish pigs	3,266 carcasses	2,415 carcasses	5,881 carcasses
Irish lambs	1,207 carcasses	444 carcasses	1,651 carcasses
Danish bacon	247,396 sides	20,474 sides	267,870 sides

In addition to the carcase meat the following consignments were examined on a 5 % basis:—

14,057 cartons Italian tinned tomatoes ex Harwich.

900 cartons Irish tinned stewed steak ex Newport.

980 cartons Spanish tinned tomatoes ex Manchester.

775 cartons Irish tinned corned beef ex Fishguard.

Poultry Inspection

(1) Number of poultry processing premises within the district	2 (1 closed halfway through the year).
(2) Number of visits to these premises	52
(3) Total number of birds processed during the year	6,300
(4) Types of birds processed	Hens
(5) Percentage of birds rejected as unfit for human consumption at processing premises	Less than 1%
(6) Weight of poultry condemned as unfit for human consumption (lbs.) (all sources)	12,942
(7) Comments on poultry processing and inspection	Both premises are Kosher.

Salmonella organisms in Poultry

The investigation of sources of salmonellae and their association with the incidence of salmonellosis in humans has been extended to include poultry. During the year forty six 'samples' were taken each consisting of approximately twenty-five heads. These were mainly from chickens but included a small number of ducks and turkeys.

A representative sample was taken from each sample after the heads had been minced and mixed at the laboratory.

The laboratory results were as follows:—

Samples examined	..	..	..	..	..	46
Samples found negative	..	..	..	..	..	37
Samples from which one or more salmonella sero-						
types were isolated	..	..	..	..	..	9
Number of isolations of:						
S. typhimurium, phagetype 32	..	..	..	..	..	1 (January)
S. „ „ U40	..	..	..	..	..	1 (August)
S. dublin	..	..	..	..	..	1 (February)
S. anatum	..	..	..	..	..	1 (March)
S. bredeny	..	..	..	..	..	2 (July, August)
S. panama	..	..	..	..	..	2 (August, September)
S. infantis	..	..	..	..	..	1 (August)
S. cubana	..	..	..	..	..	1 (October)
S.4, 12:d:-	..	..	..	..	..	1 (November)

Food Hygiene

11,070 visits were made to food premises for the purposes of food hygiene inspection; slightly in excess of last year's figure despite the loss of three district inspectors during the summer.

This gives an average of just below 3 visits per premises overall, still not high enough. However, visits to restaurants averaged 5 visits, and visits to meat preparation premises in excess of 4 visits. The increase in bakehouse visits is due to the introduction of routine liquid egg sampling.

Chicken barbecues and Chinese 'take away food' shops are increasing rapidly in number. The standard of preparation is usually good but this type of shop tends to attract teenagers and other people who are out late in the evening with the unfortunately almost inevitable result of complaints of noise nuisance and litter.

<i>Class of premises</i>	<i>Number of premises</i>	<i>Number of food hygiene inspections</i>
Cafes, restaurants, etc.	211	1,133
School canteens	126	235
Other canteens	124	253
Clubs, hotels	313	410
Butchers, meat preparation premises ..	250	954
Bakehouses	37	217
Confectioners (sugar and flour) ..	274	840
Fried fish shops	83	248
Wet fish shops	36	139
General shops (including greengrocers)	918	3,026
Wholesale depots	95	430
Ice cream premises	687	1,539
Markets	2	146
Dairies	29	73
Milk shops	383	901
Vehicles and stalls	172	277
Other food premises	56	249
	<hr/> 3,796	<hr/> 11,070

1,269 written and verbal notices were served on occupiers of food premises for contraventions of the Food Hygiene Regulations.

Details of the action necessary to remedy contraventions which were notified in writing are as follows:—

Food to be protected from dust, flies, etc.	250
Food to be protected from customers, etc.	178
Food to be protected from risk of contamination by animals	150
Clean overalls to be provided	49
Smoking to be discontinued	103
Use of unclean wrapping to cease	9
Sanitary conditions to be modified, cleansed, repaired	174
Wash hand notices to be provided	132
Provision of water supply (cold)	10
Provision of wash hand basins	33
Provision of hot water for wash hand basins	71
Provision of soap, towel, nail brush, etc.	225
Provision of sinks for food or equipment	34
Provision of hot water for sinks	26
Provision of first aid equipment	109
Provision of clothing accommodation	22
Lighting of food rooms to be improved	6
Ventilation of food rooms to be improved	12
Food rooms to be cleaned/repaired	463
Refuse to be removed	246
Cold storage for special foods	33
Hot storage for special foods	4

Legal proceedings

No proceedings were taken under the Food Hygiene Regulations.

Bacteriology of Foodstuffs

Milk Bacteriology

Heat-tested milk

During the first half of the year, heat treatment of milk was carried out at five processing plants: pasteurisation by the H.T.S.T. method at three plants; the holder process at one plant; U.H.T. at one plant by the ultra-heat treatment method. Processing ceased at one H.T.S.T. plant and the holder plant in the second half of the year, the processors continuing to act as distributors of milk processed at other plants.

Samples of raw and heat-treated milks were submitted for examination to the Public Health Laboratory. Samples were collected at the milk processing plants, wholesale and retail dairies, milk vending machines and on the rounds. Details of the number and designations of the various samples and laboratory reports are tabulated under the appropriate tables. 734 heat-treated milks were submitted to the statutory tests. All 395 samples submitted to the phosphatase test for effective pasteurisation satisfied the test. All 30 samples of sterilised milk satisfied the turbidity test indicating that they were satisfactorily processed. 50 samples out of the total 395 samples of pasteurised milk submitted to the methylene blue reduction test (for hygiene and keeping quality) were reported as unsatisfactory. The majority of these failures were in respect of milk processed outside the city. The licencing authority concerned and the company management were informed; a full investigation was carried out and stricter control was exercised at plant level. An improvement in bacteriological quality followed. 4 failures were from milk vending machines due to haphazard stock rotation at the milk vending machines which resulted in unsatisfactory laboratory reports. The operator was informed and requested to improve stock control; further samples were satisfactory. Of the 309 samples of milk treated by the ultra-heat treatment process 300 satisfied the colony count test. The test failures were attributed to contamination subsequent to packaging due to defective carton seals.

Raw Milk

Of 30 samples of untreated milk submitted for laboratory examination 14 failed the methylene blue test. The producers were informed and the results passed to the Milk Advisory Officer whose co-operation at farm level secured an improvement in the bacteriological quality of the milk. Six were positive to the Milk Ring Test (the screening test for brucella abortus) but were negative on culture. 26 samples were examined biologically and 24 were free from tubercle bacilli and brucella abortus.

The two positive reports were in respect of retail sales from producer retailers operating from an adjoining county. The Medical Officer of Health for the district served the usual restraining orders and all milk was submitted to heat treatment until the milk from herds was free from infection.

Milk submitted for laboratory examination during 1970

Heat-treated milk

Designation	Total number of samples submitted for examination	Phosphatase test		Methylene blue test		Turbidity test		Colony count	
		Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory	Satisfactory	Unsatisfactory
Pasteurised . .	246(13)*	246(13)*	—	222(9)*	24(4)*	—	—	—	—
Homogenised pasteurised	51	51	—	39	12	—	—	—	—
C.I. pasteurised	98	98	—	84	14	—	—	—	—
Ultra-heat treated . .	309	—	—	—	—	—	—	300	9
Sterilised . .	30	—	—	—	—	30	—	—	—

*These figures include the number of samples taken from milk vending machines; the number of samples from milk vending machines is shown in brackets.

Raw Milk

Milk Designation and Specific Description	Number of samples submitted for examination				Methylene Blue Test		Brucella Abortus				Biological Examination			
	Total	Methylene blue test	Brucella abortus	Biological	Sat.	Unsat.	Ring Test		Culture Test		Tubercle Bacilli		Brucella Abortus	
							Pos.	Neg.	Pos.	Neg.	Pos.	Neg.	Pos.	Neg.
Untreated . .	19	19	19	17	10	9	4	15	—	4	—	15*	1	14
C.I. Untreated	11	11	11	9	6	5	2	9	—	2	—	8*	1	7

*2 Guinea pig deaths – untreated milk.

1 Guinea pig death – untreated milk (Channel Island).

Antibiotics

All 173 samples of raw milk from farm supplies were tested for the presence of antibiotic residues and were free from these substances.

Thanks are due to Dr. R. W. S. Harvey, M.D., Director of the Public Health Laboratory, and his staff for servicing the department's sampling programme.

Liquid Egg

50 samples were taken from a number of Cardiff bakeries and submitted to the City Analyst. All samples passed the alpha-amylase test except for three from one particular batch. The manufacturer was informed but no reason for failure could be deduced since the pasteurising chart relating to the processing of this batch was satisfactory and no stocks of the faulty batch were available for further tests. Follow-up samples were found to be satisfactory.

Cream

25 samples of cream were taken for bacteriological examination as part of an investigation to ascertain the bacteriological standard prevailing in respect of cream at confectionery bakeries. The samples were taken from churns as received, after whipping and from the savoy bags. The number of organisms found ranged from 20 per ml. to 1,000,000 per ml. No brucella abortus or other pathogens were isolated. The management at the factory were regularly informed of the laboratory results and an improvement in the standard achieved.

Ice cream and ice cream premises

There are 3 premises registered for the manufacture of ice cream producing hot mix and 2 using a complete cold mix powder. The number of retailers registered for the sale of ice cream is 687.

During the year 1,539 visits were made to premises at which ice cream was manufactured or sold. 181 samples were submitted for bacteriological examination details of which are given in the table following. The unsatisfactory samples were found to be due mainly to poor sterilisation techniques or handling of equipment by retailers. Advice was given and follow-up samples proved satisfactory. One local manufacturer consistently produced grade II or grade III strawberry ice cream and on investigation and trial sampling at a number of points in the production line it was decided that the faulty samples were due to failure to sterilise certain pipe lengths immediately before production in addition to normal sterilisation after a production run. Rectifying this had the desired effect; grade I ice cream was produced. There has been no further trouble.

Total number of samples submitted for examination	Samples from local manufacturers		Samples from National concerns	Satisfactory		Unsatisfactory	
	Hot mix	Cold mix		Grade I	Grade II	Grade III	Grade IV
181	65	10	106	150	21	6	4

Consumer complaints of food abnormalities

The number of complaints about articles of food showed an increase of 23.5% above the number received in 1969. During 1970, 161 items were investigated following reference by members of the public.

<i>Product</i>	<i>Number of complaints</i>
Milk	14
Butter	1
Cheese	2
Bread	20
Canned meat	16
Cooked meat	3
Fresh meat	8
Meat pies and pasties	17
Fish	4
Fresh fruit	3
Canned fruit	10
Flour and flour confectionery	17
Sugar confectionery and chocolate	4
Canned vegetables	4
Sausages	7
Other food	31
	<hr/> 161 <hr/>

Milk and milk bottles

This number of complaints in respect of improperly cleansed milk bottles and bottled milk containing foreign bodies and extraneous matter was 14, this figure showed a decrease of 53% on the previous year and is most heartening. It is hoped this trend will continue. As usual all complaints were investigated at the various stages of production, handling and distribution and reported to the Health and Social Services Committee. Warnings were given as directed and legal proceedings undertaken in two cases; fines of £20 and £15 were imposed and 5 gns. and £5 cost were awarded.

Meat pies and pasties

17 complaints involving pies, pasties and similar products were investigated. Mould, the common cause of complaint associated with these products, was again evident, in varying degrees of intensity and development. The importance of stock control and rotation at all stages of distribution and sale was emphasised.

Foreign bodies encountered included a piece of metal identified as a portion of a corned beef tin, and a stone coloured substance which proved to be a stone from an animal kidney, the latter undoubtedly introduced as part of the filling of a steak and kidney pie. In accordance with the usual departmental procedure all cases were considered by the Health and Social Services Committee. Warnings were given as directed and legal proceedings taken in one case resulting in a fine of £15 and 5 gns. costs.

Bread

Bread was once more the food responsible for most complaints. Some 20 cases were recorded and investigated during 1970, approximately a 50% increase over the previous year. Mould, edible oil, a fly, a piece of string, flour beetles, portions of solder and a first aid finger dressing were among the reasons for complaint. Complaints regarding mould in wrapped bread appear to be increasing. After investigation and consideration warnings were given with special emphasis on the more serious incidents.

Flour and flour confectionery

The number of complaints (17) was more or less the same as in other years recently. Mould and foreign bodies were again the most common causes of complaint. A suggestion that a bilberry pie had been misdescribed was also received; this was not substantiated. The foreign bodies included a portion of solder from the seam of the can which had contained the fruit pulp used as a pie filling and a portion of hair which had undoubtedly been shed from the pastry cook's brush. Warnings were issued in all but two cases in respect of which legal proceedings were undertaken; fines of £20 and £30 were imposed and costs of £5 and 5 gns. granted. A one-pound bag of flour was found to contain larvae of the flour moth. Investigations at the retail premises showed that stock rotation and control was good and that a high standard of hygiene was practised. There had, however, been some delay between purchase and use of the flour by the complainant and it appeared that the flour contained the eggs of the flour moth when packed. The millers introduced improved control and disinfestation measures. During the last quarter of 1969 following a complaint that a mouse's head had been found in a packet of self-raising flour sold to a Cardiff resident, investigations were carried out at the flour mill in another district, and legal proceedings instituted. The investigations indicated that the mouse had probably gained access to the flour processing line after it had passed the final sieving and before the packet filling point, the mouse being decapitated by the worm drive of the machine. A fine of £20 was imposed and 10 gns. costs granted.

Sausages

Seven incidents concerning mould in sausages were recorded; investigations again showed that stock rotation and control brought about these conditions. Every effort is being made to advise retailers and wholesalers alike that over-stocking and faulty stock rotation will in many cases result in cause for complaint. After consideration by the Health and Social Services Committee warnings were issued in all but two cases in respect of which legal proceedings were taken, resulting in fines of £15 with 5 gns. costs in each case.

Lamb Chops

Following a complaint that lamb chops turned a bright red colour on cooking investigations were carried out at the retail premises and the complainant's home. The chops were also submitted to chemical and bacteriological examination. Laboratory results and the departmental inquiries showed no reason for the abnormal colouration of the meat. After further consideration it was assumed that the condition was brought about by the action of one of the pigmented bacteria, possibly *Serratia Marcescens*.

Alleged misdescription Cote de Veau Cocotte

Cote de veau cocotte, was alleged to be a cutlet of pork and not veal. Investigation showed that the cote de veau was in fact as described and not pork as alleged.

Objectionable odour in jar of cockles

Decomposition of the cockles packed and processed in an adjoining county was found to be due to an isolated error in the processing procedure. The Medical Officer of Health for the area arranged investigation at the factory.

Canned peas containing a bird and bird feathers

Two cans of peas from the same manufacturer were found to contain a bird and bird feathers respectively. Investigations showed that the bird and feathers had entered the cans at the factory and had been processed along with the peas. The exclusion of birds from factories is an acknowledged problem. Legal proceedings were undertaken and fines of £50 were imposed in each case.

Trade Descriptions Act 1968

The operation of the act and the publicity surrounding the reports of the Consumer Council continued to focus the consumer's thoughts on the necessity for meticulous quality control of all foods. This is reflected in a further increase (23.5%) in the number of consumer complaints in respect of foodstuff received during the year and detailed under the heading 'Consumer Complaints'.

In addition inspections and observations of labelling and description of all foods is carried out as normal routine duty. Local food packers continue to be advised regarding the descriptions applied to these products and the format of labels.

Legal Proceedings: Food Complaints and Sampling

Defendant No.	Offence	Fines	Costs	Total Penalties
		£	£ s. d.	£ s. d.
2 (milk processors)	Did fail to cleanse a bottle used to contain milk contrary to Regulation 27(1) of the Milk and Dairies (General) Regulations 1959 ..	20	5 5 0	25 5 0
23 (milk processors)	Did fail to cleanse a bottle used to contain milk contrary to Regulation 27(1) of the Milk and Dairies (General) Regulations 1959 ..	15	8 0 0	23 0 0
24 (manu- facturer)	Did sell to the prejudice of the purchaser a 3 lb. bag of self raising flour containing a mouse's head contrary to Section 2 of the Food and Drugs Act 1955	20	10 10 0	30 10 0
27 (Retailer)	Did sell to the prejudice of the purchaser a fancy cake that was mouldy, contrary to Section 2 of the Food and Drugs Act 1955 ..	30	5 5 0	35 5 0
32 (Retailer)	Did sell a Chocolate Easter Egg which was mouldy contrary to Section 2 of the Food and Drugs Act 1955	10	—	10 0 0
34 (Manu- facturer)	Did sell milk bread not of the substance demanded being deficient in milk solids contrary to Section 2 of the Food and Drugs Act 1955	10	5 0 0	15 0 0
36 (Manu- facturer)	Did sell a beef and mushroom pie which was mouldy contrary to Section 2 of the Food and Drugs Act 1955	15	5 0 0	20 0 0
37	Did sell skinless pork sausages which were mouldy contrary to Section 2 of the Food and Drugs Act 1955	15	5 0 0	20 0 0
38	Did sell skinless pork sausages which were mouldy contrary to Section 2 of the Food and Drugs Act 1955	15	5 0 0	20 0 0
41	Did sell a tin of peas which contained 3 bird feathers contrary to Section 2 of the Food and Drugs Act 1955	50	—	50 0 0
42	Did sell a tin of peas which contained a small bird contrary to Section 2 of the Food and Drugs Act 1955	50	—	50 0 0
2 (71) (Manu- facturer)	Did sell meat and vegetable pies which were not of the substance demanded, contrary to Meat Pie and Sausage Roll Regulations, 1967 (Section 2 of Food and Drugs Act, 1955). ..	10	5 0 0	15 0 0

Food and Drugs Sampling: irregularities of composition

During 1970 a total of 1,069 samples were investigated. Of these, 29 were in respect of labelling and were dealt with without reference to laboratory examination. The remainder consisted of 390 samples of ordinary milk, 38 samples of Channel Islands milk and 612 food and drugs (other than milk). In addition 32 miscellaneous food samples were submitted to the laboratory following consumers' complaints.

The irregularities are detailed in the table which appears below and are subsequently discussed.

**Samples submitted for analysis to the Public Analyst and examined
for compliance with the Labelling of Food Order at the Departmental Offices**

Nature of Sample	No. of samples taken	Compositional quality and/or labelling satisfactory	Adulterations or irregularity of composition	Labelling irregularities
Milk – ordinary	390	367	23	—
Milk – Channel Islands ..	38	38	—	—
Other foods	612	582	26	4
Samples examined at Departmental Offices for labelling only	29	27	—	2
TOTALS	1069	1014	49	6

Milk

Of 390 samples of ordinary milk 23 were reported as adulterated or of irregular composition though not in all cases did the sample irregularity denote irregularity of the consignment. All 38 samples of Channel Islands milk satisfied the statutory standard.

- (1) 5 samples of ordinary milk from 5 consignments comprising 390½ gallons were deficient in milk fat. Though the samples from individual churns were of irregular composition the consignments complied with the presumptive fat standard.
- (2) 8 informal retail samples of heat treated milk from a processing plant situated in an adjoining county, contained amounts of added water, varying from a trace to 4%. Extensive investigations were undertaken by the department and the processing company. Regular monitoring of the milk by the department is a matter of routine and the processors check the milk on arrival at their plant in tankers. Following the investigation further samples taken by the department were satisfactory.
- (3) 2 informal samples of one-pint bottles of pasteurised homogenised milk from the same producer contained 3% and 2% added water respectively. Results of investigations at the plant were inconclusive. Further samples were satisfactory.
- (4) One sample of a third-pint bottle of pasteurised milk contained 1% extraneous water. Investigations at the processing plant suggested that the pipe-lines of the plant had not been properly drained after sterilisation. Advice was given and further samples were found to be satisfactory.
- (5) One sample of farm milk contained 1% of added water and was 3% deficient of milk fat. The irregular sample was from one of 20 churns forming a consignment comprising 200 gallons; the average fat content of the total consignment was satisfactory. Follow-up samples in respect of the presence of extraneous water in the milk were taken. 4 out of 20 samples from individual churns contained the following amounts of added water – 1%, 3%, 4% and 11%; the last sample was also deficient of 1% milk fat.

Investigations at the farm showed that the adulteration of the milk was due to failure to divert the supply of water from the cooler after use overnight for cleansing the cooler surface. Further samples were genuine.

- (6) Two informal samples of churn milk from different producers contained a trace and 1% of water respectively. Investigations at the farms concerned showed that the adulteration had taken place due to failure to ensure that churns were properly drained after rinsing prior to being used to contain milk.

Standardised Ultra-Heat Treated Milk for the Export Market

The standardisation of ultra-heat treated milk to contain 2% and 3% fat respectively is carried out at a processing plant in the city. The milk is packed for export chiefly to middle eastern countries. During the year a total of 22 samples of standardised milk were submitted to the laboratory for examination in order to determine whether or not the products contained milk fat in accordance with the declaration as to content made by the company. All 22 samples complied with the declared fat content.

Articles other than milk

The total number of other foods examined was 612 of which 31 showed some irregularity of composition or labelling. 29 samples of drugs or other medicinal preparations were examined; one only was the subject of adverse comment, this being in respect of labelling.

The following summary will serve to indicate the nature of the irregularities encountered and subsequent action taken.

Cyclamates in soft drinks

One sample of a continental pack of concentrated lemon squash and two samples of low calorie fruit drinks containing cyclamates were found to be old stock. Since the products were manufactured prior to the introduction of the Artificial Sweetener in Food Regulations, 1969, stocks at the retail premises were dealt with on a voluntary surrender basis.

Sugar deficiency in whole lemon drink

A sample of whole lemon drink manufactured by a small national concern contained only 19.5% w/v of sugar. The facts were referred to the manufacturers, and further samples were taken. These also showed sugar deficiencies. The product is no longer being produced locally, due to centralisation of production; this should lead to stricter quality control.

Pork sausages deficient in meat

Both informal and formal samples of loose-link pork sausage manufactured by a national concern contained only 53% meat. Investigation showed that the van salesman had substituted catering-pack sausages for the retail sales product without the knowledge of his employers. The manufacturers dismissed the erring salesman. The firm was instructed to introduce more strict supervision; this was done and no further formal action was taken. In another case three informal samples of pork sausages from the same local manufacturer contained 62%, 63% and 64% respectively. The manufacturer was informed and the formulation of the product amended on two occasions; further samples were satisfactory.

Soups wrongly labelled

A sample of an imported instant soup mix was declared to contain dextrose as the second largest ingredient. Analysis showed that the product contained only a trace of dextrose and 11% sucrose. The facts were referred to the manufacturers who arranged for the format of the labelling to be amended in accordance with the ingredients. A tomato soup mix manufactured by the same company was 1% deficient of tomato solids. This matter was also referred to the manufacturers who were not aware that a standard had been set for the product. Formulation of the product was amended and a further sample was satisfactory.

The words 'milk powder' were included in the list of ingredients of a Scandinavian soup mix, but analysis showed that the product contained no milk fat. Artificial colour was present but not declared and monosodium glutamate was incorrectly described as glutamate. The matter was referred to the manufacturers who have agreed to amend the list of ingredients in order to provide a true statement of the constitution of the product.

Milk bread deficient in milk solids

One informal sample of milk bread contained only 6% skimmed milk solids and no whole milk solids. The manufacturers were informed and amended the formulation of the product. A further sample was satisfactory.

A wrapped milk loaf carrying the words 'recipe contains whole milk solids' on the wrapper contained only skimmed milk solids. A follow-up formal sample of the product from the same source was found on analysis to contain only 1% milk fat equivalent to not more than 4% whole milk solids, this being 2% below the minimum (6%) standard for whole milk solids prescribed by the Bread and Flour Regulations 1963. Legal proceedings were instituted and the manufacturers were fined £10 and £5 costs.

Malt extract deficient of cod liver oil

The product of a national concern packed for the Welfare Services contained only 8.9% w/w of cod liver oil, this amount being below 9.3% w/w, the lower limit of variation permitted for the ingredient laid down in the B.P. Codex 1968. The deficiency was regarded as marginal and the facts were referred to the manufacturers for investigation. Batch samples were investigated but no reason for the deficiency was apparent; further samples were satisfactory.

Meat and vegetable pies and pasties deficient of meat

Two informal samples each comprising two pies and one informal sample (2) pasties were reported as containing the following amounts of meat. Large pies 11%, pasties 9%. The pies and pasties were from the same local manufacturer. Advice had been given to the manufacturer over a period with only a minimal and inconsistent improvement in the quality of the product. A formal sample of pies was taken and on analysis found to be deficient of meat (9% meat). Legal proceedings were taken in respect of this alleged offence, a fine of £10 imposed and £5 costs granted.

Canned Stewed Steak deficient of meat

An informal sample of canned stewed steak in rich gravy contained only 68% meat, therefore, 9% below the minimum meat content prescribed by the Canned Meat Products Regulations 1967. The matter was referred to the retailers who withdrew all stocks from their branches, and returned them to the manufacturer.

Fruit and Nuts wrongly labelled

Two packets described as 'fruit and nuts' were wrongly labelled since the proportion of nuts was greater than that of the fruit, and though Brazil nuts were listed as an ingredient, none were present and hazel nuts had been substituted. The matter was referred to the packers who amended the label in accordance with the Labelling of Food Order 1953.

Fruit Deficiency in Apple and Blackcurrant jam

Apple and blackcurrant jam was reported as containing only 32% fruit and not 40% as required by the Food Standards Preserves Order 1953. The deficiency was reported to the management and simultaneous analysis arranged in order to reconcile the analytical results obtained by the company's laboratory and the Council's analyst; this is still proceeding.

REPORT OF THE CITY ANALYST FOR 1970

by A. R. Phillips, B.Sc., M.Chem.A., F.R.I.C.

This report outlines the work of the City Analyst's Laboratory during 1970 mainly as it concerns the City of Cardiff, a separate annual report being made to the City of Swansea.

I wish to thank the members of the Health & Social Services Committee, the retiring Medical Officer of Health, Dr. Powell Phillips and his successor Dr. Anderson for support and interest throughout the year.

A special word of thanks is due to the Deputy City Analyst, Mr. McKinlay, to Senior Analyst, Mr. Sanders, to laboratory secretary Miss Ball and also to all members of the staff for enthusiasm in carrying out the daily tasks ably and well despite staff shortages which have been experienced during the year at junior and senior level. Dr. Keith Phillips resigned his position as analyst in March and a satisfactory qualified replacement was not obtained until October when Dr. Susan Humphries was appointed. Two junior technicians resigned during 1970 and were only replaced satisfactorily in the beginning of 1971.

The Laboratory has continued to provide an analytical service for the City of Cardiff, the City of Swansea, the West Glamorgan Water Board, and also to certain private individuals and bodies. The duties covered include those of Public Analyst and Official Agricultural Analyst under appropriate acts and regulations, Analyst for the Port Authorities, and consultant to departments including that of City Engineer & Surveyor, Swansea. Notable increases in sampling of trade effluents by the latter department occurred from the middle of the year, detailed analyses and advice on appropriate treatment being required. Air pollution problems, both at Cardiff and Swansea, have also occupied the laboratory's attention.

The following table gives the numbers of samples examined from various sources during the year:

City of Cardiff

Food & Drugs Act	..	..	..	..	1,040
Milk (Special Designations) Regulations	..				30
Port Health Authority	..	..	..		61
Fertilisers & Feeding Stuffs Act	..	..	..		33
Public Health Department					
Atmospheric Pollution:					
Deposit Gauge Analyses	..	..			73
Sulphur Dioxide Determinations	..				1,925
Smoke Measurements	..	..	..		1,948
Foods	..	..	..	..	133
Waters	..	..	..	..	72
Others	..	..	..	..	45
City Architect's Department	..	..			6
City Surveyor's Department	..	..			21
City Transport Department	..	..			1
Weights & Measures Department	..				7
Other Sources	..	..	..	..	76
Laboratory Information	..	..	..		4

5,475

City of Swansea

Food & Drugs Act	586	
Public Health Department		
Atmospheric Pollution:		
Deposit Gauge Analyses	23	
Lead Peroxide Candles	24	
Waters	31	
Others	62	
Port Health Authority	11	
Weights & Measures Department:		
Fertilisers & Feeding Stuffs Act	43	
Consumer Protection Act	18	
City Engineer's Department	68	
		866
West Glamorgan Water Board		710
		<u>7,051</u>

The corresponding figures for 1969 were: City of Cardiff 4,944, City of Swansea 667 and West Glamorgan Water Board, 769; Total 6,380.

FOOD and DRUGS ACT

A total of 1,040 samples were submitted by the Chief Public Health Inspector for the City of Cardiff under this Act during 1970. They comprised 428 milks, 583 foods and 29 drugs of which 53, or 5.1 % (23 milks, 29 foods and 1 drug) were reported as unsatisfactory or irregular.

The following table lists the samples analysed, those reported as unsatisfactory being indicated by the numbers in brackets:—

Nature of sample	Number examined	Nature of sample	Number examined
Milk		Sausages	23 (5)
Ordinary	390 (23)	Soft Drinks & Soft Drinks Mix ..	75 (4)
Channel Islands	38	Soup Mix	5 (3)
Foods		Sugar Confectionery	3
Baby Foods & Syrup	38	Tea	5
Bread	11 (3)	Tomato Ketchup	2
Butter & Margarine	18	Vinegar	5
Cream & Buttermilk	14 (1)	Miscellaneous	33
Dried & Glace Fruit	11	Canned	
Dehydrated Vegetables and		Baby Food	3
Potatoes	7	Cream & Milk	15 (1)
Dessert Powder	5	Dessert	4
Dried Milk, skimmed	4	Fish	10
Edible Oils & Fats	12	Fruit & Fruit Juice	8
Flavourings & Colours	6	Meat Products	43 (2)
Flour & Flour Products	22	Pudding	4
Fruit & Nuts	2 (2)	Savoury	5
Honey	5	Soft Drinks	1
Ice Cream & Iced Confection ..	37	Soup	29 (1)
Jelly Products	19	Tomatoes	3
Meat & Vegetable Pies	5 (4)	Vegetables	14
Meat Pies	4	Drugs and Medicinal Preparations	29 (1)
Meat & Fish Pastes & Spread ..	13		
Pickles, Sauces & Chutney ..	14		
Preserves	38 (3)		
Salad Cream & Dressing	6		
Sausage Rolls	2		
		TOTALS	1040 (53)

MILK

Of the 390 ordinary milks examined 18, mostly pasteurised milks, contained small amounts of added water varying between 1 and 4 per cent but one sample contained 11 per cent of added water.

Five samples showed fat deficiencies ranging from 3 to 28 per cent but in all cases these were parts of consignments and the calculated average fat content of the bulked milk would have been above the minimum of three per cent required by the Sale of Milk Regulations 1939. Thirty-nine (or 10%) out of a total of 390 ordinary milks were low in non-fatty solids but the freezing point test showed them to be genuine milks of inferior quality.

All the 38 Channel Island Milks examined were of satisfactory composition.

A total of 173 raw milks were also tested for antibiotic residues including penicillin and all results were satisfactory. Sterilized milk (30) were examined and found to satisfy the prescribed turbidity test.

The following tables give data of the average composition of milks sampled during 1970:

AVERAGE COMPOSITION OF MILK SAMPLES 1970

Variety	Number of samples	Fat (per cent)	Non-fatty solids (per cent)	Total solids (per cent)
Channel Islands milk ..	38	4.44	8.95	13.39
Other milk samples	390*	3.68	8.63	12.31
All milk samples	428	3.75	8.66	12.41

*This number includes 18 milk samples containing added water. When these are excluded the average figures become: fat 3.69%, non-fatty solids 8.65%.

Quarterly variation in Average Composition of Milk Samples
(excluding Channel Islands milk)

Quarter	Number of samples	Fat (per cent)	Non-fatty solids (per cent)	Total solids (per cent)
First	46	3.73	8.48	12.21
Second	110	3.57	8.58	12.15
Third	192	3.67	8.68	12.35
Fourth	42	3.90	8.73	12.63
Whole year 1970	390	3.68	8.63	12.31
Whole year 1969	363	3.62	8.64	12.26

ARTICLES OTHER THAN MILK

Of the 612 samples of foods and medicinal preparations examined during the year, 30 were reported as adulterated or as not coming up to accepted standards. These samples have already been detailed in each quarterly report to Committee. A brief account is given below:—

Meat products form a fairly large group of samples examined during the year, 11 received adverse reports. Pork sausages, 5 samples contained 53, 53, 62, 63 & 64 per cent of meat compared with the legal minimum of 65 per cent of meat.

Two samples of meat and vegetable pie and one of pasties contained 11 per cent, $8\frac{1}{2}$ per cent and 9 per cent of meat respectively, whereas the Meat Pie & Sausage Roll Regulations 1967 requires a minimum meat content of $12\frac{1}{2}$ per cent. A further sample of meat and vegetable pies, taken formally, consisted of 2 pies each of which contained not more than 9 per cent of meat.

Corned Beef with cereal was reported as being of inferior quality since it contained 70 per cent of corned beef with 7 per cent of starchy cereal. The Canned Meat Regulations 1967 require a meat with cereal to contain at least 80 per cent of meat, i.e., 80 per cent of corned beef in this particular product.

Canned stewed steak in rich gravy contained only 68 per cent of meat and was therefore 9 per cent deficient in the required meat content since the regulations require canned meat in gravy to have a meat content of not less than 75 per cent.

Bread sold under the description milk bread is required to contain not less than 6 per cent of whole milk solids. Two of the samples of milk bread submitted informally were found on analysis to contain skimmed milk solids but not whole milk solids and another taken formally contained not more than 4 per cent of whole milk solids. The latter sample was the subject of a successful prosecution against a local bakery.

Two milk products, evaporated full cream milk and double cream contained 8.8 per cent of milk fat and 47.2 per cent of milk fat respectively. These were small deficiencies since the appropriate regulations require 9 per cent fat in the former product and 48 per cent in the latter.

Three samples of concentrated soft drink were found to contain cyclamate artificial sweetener. These samples were received in the 1st quarter of 1970. The Artificial Sweeteners in Food Regulations 1969 prohibited the use of cyclamate as an artificial sweetener after the 1st January, 1970; the products had probably been manufactured before this date. A sample of Whole Lemon Drink contained only 19.5 per cent w/v of sugar although the Soft Drinks Regulations specify not less than $22\frac{1}{2}$ per cent.

The Food Standards Preserves Order 1953 lays down standards of fruit content for jam and similar preserves. Two samples of imported 'Red Currant Jam – Whole Fruit,' contained not more than 20 per cent fruit and were also low in insoluble solids (indicating removal of part of the fruit); the regulations require not less than 35 per cent. For Apple and Blackcurrant Jam the minimum fruit content required is not less than 40 per cent but a single sample sold under this description contained not more than 32 per cent.

Canned soup (1) and soup mix (3) received adverse reports; Canned cream of tomato soup contained only 2.3 per cent of butterfat (and no other fat) instead of at least $2\frac{1}{2}$ per cent, tomato soup mix contained only 1 per cent of tomato solids after reconstitution compared with a recommended 2 per cent; mushroom soup mix had incorrect list of ingredients since the sample contained sucrose, instead of dextrose, which was declared; deep sea fish soup mix failed to state the ingredients correctly and in proper order.

IMPORTED FOODS SUBMITTED BY THE PORT HEALTH AUTHORITY

The Chief Port Health Inspector for the Cardiff Port Health Authority submitted 61 samples for chemical examination during the year. They consisted of the following articles of food:

Canned:

Grapefruit Juice	..	..	..	..	2	Grapefruit	..	..	..	..	18
Orange Juice	..	..	..	..	1	Lemons	..	..	..	..	3
Tomatoes	..	..	..	..	4	Oranges	..	..	..	..	30
Avocado Pear	..	..	..	..	1	Tangerines	..	..	..	..	1
New Potatoes	..	..	..	..	1						

Routine tests were made on the fresh citrus fruits for diphenyl, ortho phenyl phenol, mineral oil, thiourea and pesticide residues. Other than for diphenyl all results were negative. Diphenyl, permitted legally up to 100 p.p.m. was present in most cases, the results being as follows, the figures in brackets indicating the number of samples showing the same level.

Grapefruit	5, 8, 10 (4), 15 (2), 20 (2), 30 (3), 35, 40 (2), 45, 50
Lemons	10, 17, 55
Oranges	5, 10 (3), 15 (8), 20 (3), 25, 30 (5), 35 (2), 40 (3), 45, 50, 60 (2)
Tangerine	10

The canned products did not contain significant amounts of tin, lead or copper.

The Swansea Port Health Authority also submits samples to this laboratory for chemical analysis and during the year 11 samples were received and reported upon.

FERTILISERS AND FEEDING STUFFS ACT 1926

A total of 33 samples were submitted by the Chief Public Health Inspector during 1970. They consisted of 9 Fertilisers and 24 Feeding Stuffs.

The Fertilisers & Feeding Stuffs Regulations require in the case of fertilisers a statutory declaration of major nutrients (nitrogen, phosphorous and potash) and specify permitted limits of variation. Only one of the 8 fertilisers was incorrect. This contained 0.9 units of soluble phosphoric acid above the limit of variation but this excess is not considered to be to the prejudice of the purchaser. None of the samples of fertilisers declared trace elements. After October 1970 full declarations of added nutrients such as copper, iron, manganese, molybdenum, boron, etc., is required on prepacked articles on retail sale. This will entail a considerable increase in analytical work and will require additional equipment (atomic absorption spectrophotometer) to carry out this work efficiently.

Statutory declarations for feeding stuffs generally include major food constituents, oil, protein and fibre and in some instances added copper and in others added coccidiostats. Four samples were outside the limits of variation; Stud Cubes contained 0.1 units of protein above, and Turkey Finishing Pellets contained 1.0 units above the upper limit of variation. Such excesses, however, are not considered to be to the prejudice of the purchaser. Two samples of Dairy Pellets were both 0.1 units of protein below the limit of variation. Such deficiency, although slight, is to the prejudice of the purchaser. Added copper was declared at 190 p.p.m. in 3 samples of Pig Meal and 200 in a fourth sample. The results were found to be within the limits of variation permitted. The regulations require a statement of added copper if present in excess of 70 parts per million. A sample of Cattle Feed High Protein Pellets did not declare the presence of added copper but analysis showed 80 p.p.m. The regulations also require a declaration of added coccidiostats and such declarations were made in respect of 5 samples, Intensive Growers Pellets 2 and Turkey Crumbs and Pellets 3.

The Chief Inspector Weights & Measures Department enforces this Act for the City of Swansea and submitted 43 samples during the year.

ANALYTICAL METHODS DEVELOPMENT

Due to staff shortages already referred to, the amount of analytical development, which is essential to proper progress in the specialised work of the Public Analyst, has been somewhat restricted. Some items which occupied our attention during the year included:—

Electrophoresis

This is a valuable technique for the characterisation of animal proteins. Some work has been done by one of our analysts, Mr. J. G. Jones on the band pattern of pork, beef and mutton flesh using cellulose acetate membranes. Results were promising and will be further studied using vertical gel electrophoresis. Identification of raw fish species is another application in which we are interested.

Infra-red spectrophotometry

The infra-red spectra of synthetic food colours can in certain cases provide confirmation of identity. Ponceau MX, prohibited from use in January 1971, was examined by infra-red, after isolation of the main fraction by paper chromatography. It will be necessary to prepare reference spectra of all permitted food colours and compare these with the colours extracted from foodstuffs.

Lead Pollution

The laboratory was involved in an incident of fatal lead poisoning of horses in Swansea. Mr. McKinlay and I visited the site and many samples of soil, grass, leaves, dust and rain-water were examined for lead and zinc in an area around a factory. Some of the soil samples contained 300 p.p.m. and more of lead. Investigation was also made of the proportion of surface lead in leaves and edible crops.

Microscopy

A library of colour photomicrographs showing the diagnostic features of dusts and other particulate matter is a useful aid to identification in air pollution problems. A start has been made in this direction during the year and it is hoped to extend this activity in the future.

AIR POLLUTION

The necessary analytical work in this field is carried out for both Cardiff and Swansea and includes monthly analysis of deposit gauge contents for soluble matter, insoluble matter (ash and combustible matter), pH value and volume of rainwater collected.

The results for the year for the three deposit stations in Cardiff are summarised, together with 1969 data, in the following table:

Deposition in Tons per square mile per year

Station	Total Insoluble deposit		Insoluble Mineral Matter – Ash		Rainfall (inches)	
	1970	1969	1970	1969	1970	1969
City Hall	79	122	30*	81	38	36
Curran Road	126	162	86	111	42	37
Moorland Road	245	246	190	193	37	35

*Results for nine months only

Additional deposit gauges sited near the Whitchurch coal depot were examined for total deposited matter (coal and coal dust especially). During the year legal action was taken by the Authority in connection with this nuisance and scientific evidence was prepared by Mr. McKinlay in co-operation with the Chief Public Health Inspector and his staff. This evidence included records collected since the gauges were set up, comparisons with other heavily polluted areas, graphical data and close-up photographs of the actual deposits.

Continuous recordings of the daily smoke and sulphur dioxide levels in the air at six stations within the city were made throughout the year. Four of the stations are now equipped with automatic 8-day sampling units, and in these cases the titrations for sulphur dioxide and the reflectometric measurements of the smoke stains are made weekly.

The results for 1970, together with those for the previous year are tabulated below:

Smoke and Sulphur dioxide concentrations

Site	Smoke Concentration Micrograms per cubic metre Daily Average		Sulphur dioxide Concentration per cubic metre Daily Average	
	1970	1969	1970	1969
City Hall	44	40	107	118
Curran Road	52	52	88	101
Moorland Road	52	64	118	118
Llanrumney	30	34	61	77
Crofts Street	51	59	94	110
Llanishen	23	14	48	60

MISCELLANEOUS SAMPLES EXAMINED FOR PUBLIC HEALTH DEPARTMENT

Samples of a miscellaneous kind are submitted by Public Health Inspectors as a result of complaints from the public with regard to the quality of food (including the presence of foreign bodies), pollution of the air and doubts as to the purity of tap water.

A total of 178 samples were received during the year and some of these are mentioned below.

(a) Foods

Milk bottles containing dirt and other extraneous objects (insect pupae and animal hairs, slug, fungal and algal filaments); cake (cockroach fragments); bread (part of fly); bread (finger plaster); bread (discoloured dough); canned spam (piece of hardened cement); steak & kidney pie (stone fragment containing 75 % silica); margarine (cardboard fragment); canned pears (part of wasp); fish cake (black lump of potato); corned beef (lump of discoloured meat fibres); pasty (fragments of wheat starch, grit and stone); minced meat (foreign object – papillae from cheek of cow); frozen soft drinks (mould pellicles).

Some samples showed chemical contamination; e.g.:—

Lard (0.3 % soap); corned beef (lighter fuel); tomato soup (high iron and tin); cider (6 % caustic soda); soft drinks (alcoholic fermentation).

A number of articles were submitted for investigation of composition and included diabetic frozen dessert and ordinary ice cream; UHT milks, halibut oil, soft drink foam crystals (query cyclamate), baby food, sweets, frozen chop, coffee, eye lotion, but no abnormalities were detected. A few samples were reported as unsatisfactory: honey (consisted of golden syrup); cream (3) (deficient in fat); milk (contained 18 % added water); sausages (4) (deficient in meat).

UHT milk cartons and the packaging material from which they were made, were examined for possible pinhole defects. The material consisted of aluminium foil between polythene layers.

During the year a total of 51 samples were submitted under the Liquid Egg (Pasteurisation) Regulations 1963. These regulations specify the conditions under which liquid egg shall be pasteurised and require that such pasteurised liquid egg shall satisfy the prescribed alpha amylase test. This is a chemical test somewhat similar to the phosphatase test for pasteurised milk and is based on the deactivation of the starch splitting enzyme amylase under the conditions of pasteurisation. Three of the samples examined were unsatisfactory.

(b) Dusts and deposits

Various kinds were submitted for identification. Some had settled in or near houses and were the subject of complaint. Microscopical and other tests were made in order to identify the probable source. In addition to the daily smoke filter tests, special examination of filters for metallic contamination (lead) was made in one area of Cardiff.

(c) Waters

Independent routine analysis of 31 water samples taken from consumers domestic taps throughout the city were made during 1970. Eight samples of drinking water were received on complaint. A few of these contained deposits of iron oxide derived from the mains. Other waters examined included, swimming bath samples (for organic quality, clarity, alkalinity and chlorine residual) and seepage waters in order to indicate the probable source. In some cases this may be leakage from cracked sewer pipes, defective mains, from a deep spring or from rainwater which has percolated through surface soil.

SAMPLES RECEIVED FROM OTHER SOURCES

CITY SURVEYOR'S DEPARTMENT

Analyses included lubricating oil, grease and antifreeze for compliance with specification; putty for metal windows; bricks and mortar; boiler water, mains supply water and corroded parts of a hot water meter to ascertain cause of failure; white line road marking material – comparison of old and new supply.

CITY ARCHITECT'S DEPARTMENT

Visits were made to a building where the floor tiles were becoming detached and tests were carried out on the cement and adhesive for solvent residues. Sediment and flakes of paint from the Fitzalan School swimming pool were analysed.

WEIGHTS and MEASURES DEPARTMENT

The accurate specific gravity was determined on 5 petrol samples; whisky and orange was examined in connection with short measure.

PRIVATE SAMPLES

A variety of samples were examined during the year. They included: lead content of faeces and of paint, composition of human milk (for local hospitals); water from vending machine, canal water and river water (for private firms); sewage analysis (for the University), raw chipped potatoes, cooking oil, double cream, UHT milk, egg flip (for various vendors and persons requiring information). Appropriate fees were charged for this work.

Also on a fee paying basis, this laboratory has continued to provide a service to private persons and solicitors, acting on their behalf, under the Road Safety Act, 1967. Persons charged under this Act are given a second specimen of blood or urine which they may submit for independent analysis if they so wish. The analysis is carried out using the gas chromatograph – the only satisfactory method for the blood specimens supplied which are very small (about 0.3 millilitres).

During 1970, 30 specimens (compared with 20 in 1969) were analysed. The maximum limit laid down by the Act is 80 milligrammes of alcohol per 100 millilitres of blood or 107 milligrammes per 100 millilitres of urine. The results, in increasing order of alcohol content were as follows:—

Blood: 0, 2, 33, 37, 41, 73, 82, 103, 105, 110, 114, 120, 140, 155, 160, 160, 175, 190, 200, 215, 225, 230, 260, 270, 270, 280, 430.

Urine: 122, 175, 195.

It is of interest that 6 out of 27 blood samples were under the limit. One containing no alcohol was from a doctor suffering from pancreatitis. He had not taken any alcoholic drink but nevertheless had given a positive breath test.

SAMPLES EXAMINED FOR THE CITY OF SWANSEA

Your Public Analyst and Deputy Public Analyst hold official appointments to the City of Swansea under the Food & Drugs Act and during the year a total of 586 samples (64 unsatisfactory) were received from their Chief Public Health Inspector. Other samples examined included: waters, deposit gauges and miscellaneous (soils, grass, dusts for lead) for the Public Health Department; foods for the Port Health Authority; sewages and trade effluents for the City Engineer & Surveyor; fertilisers, feeding stuffs, toys, etc., for the Chief Inspector, Weights & Measures Department.

ANALYSES MADE FOR THE WEST GLAMORGAN WATER BOARD

The West Glamorgan Water Board, which at present serves a population of about 400,000, continued to submit samples of water for analysis during 1970. The samples covered a wide variety of water sources including upland surface, river derived and from deep springs. A total of 710 samples were received and the results of all analyses made were reported to the Water Engineer of the Board.

FEES

During 1970, fees received by the laboratory from all sources (excluding the Public Health Department of the City of Cardiff) amounted to £5,899.

REPORT OF THE VETERINARY OFFICER CHIEF MEAT INSPECTOR AND ABATTOIR AND MARKETS MANAGER

by E. B. DAVIES, B.V.Sc., M.R.C.V.S.

Staff Changes

Mr. C. W. D. Jones, formerly employed in the Finance Section of the Department of Health, transferred to the Abattoir to become Senior Clerical Assistant.

DISEASES OF ANIMALS ACT 1950

The Act empowers the Minister of Agriculture, Fisheries and Food to make Orders and Regulations for the control and eradication of animal diseases which are of economic importance or a danger to public health. The Act also provides for the humane treatment of animals in transit and imposes restrictions on the importation of certain commodities including animals, meat, poultry, hay and straw.

There are at present sixteen diseases scheduled under this Act and if they are diagnosed, the Ministry of Agriculture, Fisheries and Food must be notified. Many are now extinct in Great Britain and it is to be hoped that they will remain of historical importance only. Certain others, however, have still to be taken seriously, either from the public health point of view or because of the serious depredations which they may make on the livestock industry.

The Swine Fever Order 1963: A determined eradication policy was started as recently as 1963 in an attempt to wipe out this disease. It has been so successful that this is the fourth consecutive year in which no cases have been recorded in this country.

The Regulation for the Movement of Swine Order 1959: This order provides a means of tracing in-contacts to Swine Fever, and so its importance has been much diminished by the success of the Swine Fever Order 1963. It still, however, serves as a safety device if the disease should re-occur. During the year four hundred and fifty four licences were received authorising the movement of 3,542 pigs from auction markets and pig dealers' premises to the Abattoir and pig feeders' premises in the city.

The Diseases of Animals (Waste Foods) Order 1957: This Order provides for the boiling of kitchen waste before it is used as an animal feeding stuff so as to prevent the spread of disease and boiling plants and equipment have to be licensed. Swill feeding is declining in popularity because it is uneconomic and produces a poor quality carcase. Twenty-four visits were made to premises in the city in connection with this Order and no offence was detected.

The Tuberculosis Order 1964: Tuberculosis was not found in one of the 17,430 cattle which were routinely slaughtered at the Abattoir. Thirty-five were, however, expressly sent to the Abattoir by the Ministry of Agriculture, Fisheries and Food as a result of having failed the tuberculin test. As was to be expected, lesions were found in these animals and reports were sent to the Ministry of Agriculture, Fisheries and Food.

Anthrax Order 1938: One case of anthrax was detected in the carcase of a cow at a knacker's yard in the city. The carcase was burned and the Medical Officer of Health checked upon the health of the men who had been in contact with it. As a precautionary measure, blood smears were examined from three pigs, three sheep and two calves which either died in the lairage or arrived dead at the Abattoir. All proved negative.

The Fowl Pest Order 1936 – 1963: Although this disease appears to be on the increase again after being quiescent for a number of years, no cases occurred in the city during the year.

Brucellosis (Accredited Herds) Scheme: Eight cattle which reacted to the Brucellosis Test were sent in by the Ministry of Agriculture, Fisheries and Food for slaughter at the Abattoir. Post mortem reports and specimens were forwarded to the Ministry.

Rabies Order 1938: One of the symptoms of rabies in dogs is that affected animals may attack people. We are occasionally requested by the police to examine dogs which have shown a vicious nature to confirm that they are indeed not suffering from rabies. Three such dogs were examined during the year and proved free from disease communicable to man.

NEW LEGISLATION

Rabies: The reappearance of this disease in this country after its absence for several decades led to certain new legislation, some of which was quickly superseded to meet the changing circumstances:—

The Importation of Dogs and Cats (Amendment No. I) Order 1970: The case of rabies which occurred at the end of 1969 in a dog after it had spent six months in quarantine served to show that the incubation period could be longer than had hitherto been thought possible. The statutory period for quarantine was increased from six months to eight months in 1969 and this Order served to further extend the period to twelve months. In practice, because of the No. II Order, mentioned below, it only applied to animals already in quarantine.

The Importation of Dogs and Cats (Amendment No. II) Order 1970: This Order totally prohibited the importation of dogs and cats except from Ireland, The Isle of Man and the Channel Islands as from 21st March, 1970. Any animal landed after that date had either to be immediately re-exported or else destroyed.

The Importation of Dogs and Cats (Amendment No. III) Order 1970: This Order superseded the two previous Orders and the position at the end of the year was that dogs and cats could again be imported, subject to six months quarantine and vaccination while in quarantine. The use of vaccination in addition to quarantine is a new development in this country, and has only become possible as a result of improvements in vaccines in recent years.

ANIMAL WELFARE

The Ponies Act 1969: This Act came into force during this year and served to extend to ponies the protection already afforded to certain other horses, namely heavy draft horses, vanners, mules, jennets and asses, by prohibiting the export of any animal under a certain specified value. Previously, many ponies were exported for slaughter for human consumption, but the financial provisions now make this uneconomic.

The Export of Horses (Protection) Order 1969 and the Export of Horses (Excepted Cases) Order 1969: These Orders came into force during the year and require the provision of approved premises for the resting of animals awaiting export. Exception is made only when the Ministry of Agriculture, Fisheries and Food is satisfied that the horses are intended for certain specified events such as racing or polo.

The Slaughter of Animals Act 1958: Six new licences and thirty renewals were granted to stun and slaughter animals for the year beginning 1st January, 1971.

The Riding Establishment Act 1963: Only one establishment is licensed under this Act. Periodical visits were made to the premises.

The Animals Boarding Establishment Act 1964: Two premises are licensed under this Act. Periodical visits were made to the premises.

Protection of Animals Act 1911 – 1927: Stray animals are frequently injured in road accidents and veterinary assistance is often required. The bulk of this work is done by the veterinarians in General Practice in the city, but assistance was given on eight occasions.

Pontcanna Equitation Centre: Veterinary assistance was given to the Equitation Centre as required.

MEAT INSPECTION STATISTICS

Carcases and Offals Inspected and Condemned in Whole
or Part

	Cattle excluding Cows	Cows	Calves	Sheep and Lambs	Pigs	Horses
Number killed	17,173	292	1,618	58,667	27,426	Nil
Number inspected	17,173	292	1,618	58,667	27,426	Nil
ALL DISEASES EXCEPT TUBERCULOSIS						
Whole carcases condemned	4	4	26	106	57	Nil
Carcases of which some part or organ was condemned	1,862	124	13	6,278	4,315	Nil
Percentage of number inspected affected with disease other than tuberculosis or Cysticercosis	10.86	48.83	2.41	10.88	15.94	Nil
TUBERCULOSIS						
Whole carcases condemned	Nil	2	Nil	Nil	Nil	Nil
Carcases of which some part or organ was condemned	2	6	Nil	Nil	225	Nil
Percentage number inspected affected with Tuberculosis	0.01	2.74	Nil	Nil	0.82	Nil
CYSTICERCOSIS						
Carcases of which some part or organ was condemned	46	6	Nil	Nil	Nil	Nil
Carcases submitted for treatment by refri- geration	Nil	Nil	Nil	Nil	Nil	Nil
Generalised and totally condemned	Nil	Nil	Nil	Nil	Nil	Nil
Percentage of number inspected affected with Cysticercosis	0.27	2.05	Nil	Nil	Nil	Nil

Animals Slaughtered – Comparative Table

	1970	1969	1968	1967	1966	1965	1964	1939
Cattle ..	17,465	12,087	13,751	11,551	8,524	8,301	9,918	6,693
Calves ..	1,618	1,574	2,283	3,172	2,345	1,654	2,080	7,788
Sheep ..	58,667	49,875	64,230	76,683	68,299	67,179	77,466	53,632
Pigs ..	27,426	28,533	30,595	27,037	30,543	31,033	28,353	25,257
TOTAL ..	105,176	92,069	110,859	118,443	109,711	108,167	117,817	93,370

Incidence of Tuberculosis

	Macroscopic Lesions	Percentage	Percentage Corresponding Period 1969
ANIMALS SLAUGHTERED			
Sheep 58,667	Nil	Nil	Nil
Pigs 27,426	225	0.82	Nil
TOTAL ANIMALS SLAUGHTERED (including Attested, Reactor and Irish Cattle)			
Cows 292	25	8.56	2.75
Steers/Heifers 17,173	10	0.05	Nil
Bulls —	Nil	Nil	Nil
Calves 1,618	Nil	Nil	Nil
ATTESTED CATTLE			
Cows 267	Nil	Nil	Nil
Steers/Heifers 16,710	Nil	Nil	Nil
Bulls —	Nil	Nil	Nil
Calves 1,618	Nil	Nil	Nil
KNOWN REACTORS AND DANGEROUS CONTACTS (sent in by the M.A.F.F.)			
Cows 25	6	24.0	55.25
Steers/Heifers 10	2	20.0	Nil
Bulls —	Nil	Nil	Nil
Calves —	Nil	Nil	Nil
IMPORTED IRISH CATTLE			
Steers/Heifers 453	Nil	Nil	Nil

Incidence of Cysticercosis

Animals Slaughtered	Number of Cases of Cysticercosis Bovis	Percentage of Infestation	Percentage Corresponding Period 1969
Cows 292	6	2.05	0.61
Steers/Heifers 17,173	46	0.27	0.10

Incidence of Hydatid Cysts

Animals Slaughtered	Number of Cases of Hydatid Cysts	Percentage of Infestation	Percentage Corresponding Period 1969
Cattle 17,465	169	0.96	1.25
Sheep 58,667	1,340	2.28	2.69

Table Showing Causes of Rejection of Carcases and Part Carcases

DISEASES	CATTLE		CALVES		SHEEP		PIGS	
	Total	Part	Total	Part	Total	Part	Total	Part
Tuberculosis/Emaciation ..	2	—	—	—	—	—	—	225
Oedema/Emaciation ..	3	—	2	—	68	—	1	—
Decomposition	—	42	—	—	16	6	3	340
Traumatism	—	49	—	—	—	12	1	125
Pyæmia	—	—	5	—	—	—	—	—
Arthritis	—	—	—	—	—	4	7	36
Erysipelas	—	—	—	—	—	2	2	7
Abscesses, Multiple								
Abscesses	—	18	—	—	1	54	13	258
Pleurisy, Acute Pleurisy ..	1	1	6	—	8	18	11	44
Moribund	1	—	3	—	3	—	7	—
Peritonitis, Acute								
Peritonitis	1	4	2	—	—	8	—	—
Mastitis, Septic Mastitis ..	1	—	—	—	—	—	—	—
Jaundice	—	—	—	—	—	—	3	—
Septicæmia	—	—	—	—	—	—	1	—
Fevered	—	—	4	—	8	—	2	—
Bonetaint	—	7	—	—	—	—	—	—
Multiple Tumours	1	—	—	—	1	—	1	—
Back Sticking	—	—	—	—	—	—	—	5
Injuries/Bites	—	—	—	—	—	1	1	21
Immaturity	—	—	4	—	—	—	—	9
Bloodsplashing	—	—	—	—	—	—	3	4
Uraemia	—	—	—	—	—	—	1	1
Urticaria	—	—	—	—	—	—	—	1
Presternal Calcification ..	—	3	—	—	—	—	—	—
Lymphatic Adenoma ..	—	—	—	—	1	—	—	—
TOTAL	10	124	26	—	106	105	57	1,076

Weight of Meat and Offal Rejected from Animals Slaughtered

	Tons	Cwts.	Qrs.	lbs.
10 Carcases Beef	2	3	1	12
26 Carcases Veal	—	13	0	21
106 Carcases Mutton	1	9	1	12
57 Carcases Pork	4	2	3	6
124 Part Carcases Beef	1	11	0	14
105 Part Carcases Mutton	—	12	3	18
1,076 Part Carcases Pork	4	7	0	0
Beef Offal	27	17	2	12
Calf Offal	—	1	0	21
Sheep Offal	11	14	2	6
Pig Offal	6	7	0	21
TOTAL	61	0	1	3

Total Weight of Meat and Offal Condemned:

61 Tons 0 Cwts. 1 Qr. 3 lbs.

Condemnation Certificates

1,050 Certificates were granted in respect of condemned carcasses, part carcasses and offals at Cardiff Abattoir and Wholesale Meat Market during the year 1970.

Number of Organs Rejected

	CATTLE	CALVES	SHEEP	PIGS
HEADS (including Tongues)				
Tuberculosis	14	—	—	225
Other Conditions	102	—	—	—
TONGUES				
Tuberculosis	—	—	—	—
Other Conditions	45	—	—	—
LUNGS				
Tuberculosis	17	—	—	—
Other Conditions	1,192	—	—	—
HEARTS				
Tuberculosis	15	—	—	—
Other Conditions	126	—	—	—
SKIRTS				
Tuberculosis	4	—	—	—
Other Conditions	121	—	—	—
LIVERS				
Tuberculosis	—	—	—	—
Other Conditions	4,956	—	7,849	1,733
PLUCKS				
Tuberculosis	—	—	—	—
Other Conditions	—	13	4,498	1,506
TRIPES				
Tuberculosis	—	—	—	—
Other Conditions	53	—	—	—
TAILS				
Tuberculosis	—	—	—	—
Other Conditions	94	—	—	—

PORT HEALTH SERVICE

REPORT FOR 1970 OF MR. T. G. NEWBY, MASTER MARINER, M.A.P.H.I. CHIEF PORT HEALTH INSPECTOR

The Cardiff Port Health Authority was constituted by Provisional Order in 1882, becoming permanently constituted with extended limits of jurisdiction in 1894. The limits of the Port Health District extend from Sully Island to the Rhymney River, the Authority having jurisdiction over all waters, docks, harbours and vessels within the said limits.

The Port Health Authority is invested with all the functions, rights and liabilities of an Urban Sanitary Authority under certain sections of the Public Health Acts, so far as they are applicable to waters, vessels, persons, goods or things on, or landed from, any vessel within the said jurisdiction.

In accordance with the instructions of the Ministry of Health, Form Port 20, Sections I, V, VI, VIII, XIV, XV and XVI of the report are not repeated in full.

SECTION I—STAFF

TABLE A

Changes in Medical Staff during the year.

Dr. W. Powell Phillips, O.B.E., M.R.C.S., L.R.C.P., D.P.H., Medical Officer of Health, City and Port of Cardiff, retired on 31st August, 1970.

Dr. D. J. W. Anderson, M.B., B.Ch., D.P.H., Deputy Medical Officer of Health was appointed Medical Officer of Health, City and Port of Cardiff as from 1st September, 1970.

Dr. J. N. P. Hughes, M.B., B.Ch., D.P.H., Senior Medical Officer was appointed Deputy Medical Officer of Health as from the 1st September, 1970.

SECTION II

AMOUNT OF SHIPPING ENTERING THE DISTRICT DURING THE YEAR

The number and tonnage of vessels entering the port (which includes Ely Harbour) inspected by Officers of the Port Health Authority during 1970 are set out below:—

TABLE B

Ships from	Number	Tonnage	Number Inspected by the		Number of Ships reported as having or having had during the voyage infectious disease on board
			Medical Officer of Health	Port Health Inspector	
Foreign Ports ..	461	1,183,524	89	118	Nil
Coastwise	748	991,841	1	76	Nil
TOTAL ..	1,209	2,175,365	90	194	Nil

The following table shows the number of vessels entering the port which were dealt with by the department each month during 1970.

Month	From Foreign Ports	Coastwise	Total
January	30	56	86
February	24	60	84
March	36	67	103
April	23	58	81
May	50	62	112
June	32	52	84
July	30	57	87
August	43	71	114
September	47	75	122
October	51	70	121
November	51	60	111
December	44	60	104
TOTAL	461	748	1,209

The nationalities of the several types of vessels entering the port which were dealt with by the department during 1970 are shown in the following table:—

Nationality	Steam	Motor	Dumb Barges	Total
Honduras	—	1	—	1
Ghananian	—	1	—	1
Belgian	10	3	—	13
British	17	626	—	643
Danish	—	52	—	52
Dutch	—	62	—	62
Finnish	—	11	—	11
German	—	135	—	135
Greek	1	17	—	18
Indian	1	7	—	8
Irish	—	23	—	23
Israeli	—	5	—	5
Liberian	12	33	—	45
Norwegian	1	83	—	84
Pakistani	—	1	—	1
Panamanian	—	6	—	6
Polish	1	8	—	9
Russian	—	37	—	37
South African	—	3	—	3
Spanish	2	7	—	9
Swedish	—	17	—	17
Yugoslav	—	5	—	5
Italian	—	2	—	2
American	1	—	—	1
Bulgarian	—	7	—	7
Chinese	—	1	—	1
Cypriot	—	4	—	4
Icelandic	—	5	—	5
Lebanese	—	1	—	1
TOTAL ..	46	1,163	—	1,209

SECTION III

CHARACTER OF SHIPPING AND TRADE DURING THE YEAR

TABLE C

Passenger Traffic	{	Number of passengers INWARDS	Commonwealth	265	}	375
			British	91		
			Alien	19		
	{	Number of passengers OUTWARDS	Commonwealth	156	}	214
			British	44		
			Alien	14		
Cargo Traffic	{	Principal IMPORTS – Iron ore, timber, bones, general, fuel oil, fruit, grain and aluminium.				
		Principal EXPORTS – Cars, heavy iron and steel goods, and general merchandise.				

Principal countries from which ships arrive – Belgium, Canada, Finland, France, Germany, Holland, India, Israel, Liberia, Norway, Poland, Portugal, Russia, Spain, Sweden, United States of America, West Africa and South Africa.

SECTION IV

INLAND BARGE TRAFFIC

Numbers and tonnage using the Districts and Places served by the Traffic:

NONE

SECTION V

WATER SUPPLY

NO CHANGE

Report and tests for contamination. – During the year 15 samples of drinking water from ships were submitted to the Public Health Laboratory for bacteriological examination, the results being as follows:—

Satisfactory	..	..	15
Contaminated	..	..	—
Total	..	..	15
			—

SECTION VI

PUBLIC HEALTH (SHIPS) REGULATIONS 1952 – 1961

NO CHANGE

Cleansing and Disinfestation. – During the year 9 vessels were found to be slightly infested with cockroaches, and notices were served upon the Masters requiring them to take all necessary steps to eradicate the insects. No seamen suffering from scabies were treated at the Cardiff Disinfecting Station.

SECTION VII

SMALLPOX

Name of Isolation Hospital to which Smallpox cases are sent from the District:

From Lansdowne Hospital to St. Mary's Hospital, Smallpox Unit, Penarth.

Arrangements for transport of such cases to that hospital by ambulance, giving the name of the Authority responsible for the ambulance and the vaccinal state of the ambulance crews:

Arrangements are made at the Lansdowne Hospital, the Glamorgan County Council being responsible for the ambulance service.

Ambulance crews are vaccinated.

Names of Smallpox consultants available:

G. F. J. Thomas, M.R.C.S., L.R.C.P., D.P.H.

Medical Superintendent,

St. David's Hospital, Cardiff.

E. Waddington, M.D., M.R.C.P.

St. Winifred's Hospital, Cardiff.

M. S. N. Pathy, M.R.C.S., M.R.C.P.

Mathern Lodge,

Cefn Coed Crescent, Cardiff.

Facilities for laboratory diagnosis of Smallpox:

Facilities are provided by the Public Health Laboratory Service, Institute of Pathology, Cardiff Royal Infirmary.

SECTION VIII

VENEREAL DISEASE

The Treatment Centre for the diagnosis and treatment of venereal disease for seamen is at the Cardiff Royal Infirmary and 214 seamen were treated during the year. Nineteen cases of venereal disease came to the knowledge of the Port Health Inspectors during the year and were recommended for treatment at the centre.

The following table provides an analysis of the country and origin of the seamen and the conditions for which they were treated:

Nationality	Number Examined	Syphilis	Gonorrhoea	Other Conditions
British	115	—	22	93
Greek	30	1**	9	20
Yugoslav	2	—	—	2
German	11	—	1	10
Swedish	4	—	—	4
Honduras	1	—	—	1
Columbian	1	—	—	1
South African	1	—	1	—
Portuguese	2	1*	—	1
Arab	5	1**	1	3
Grenada	1	—	—	1
British West Indian	1	—	1	—
Danish	2	—	1	1
Dutch	1	1**	—	—
Pakistani	1	1**	—	—
Somali	1	—	—	1
Maltese	1	—	—	1
Indian	4	—	—	4
Norwegian	9	—	3	6
Belgian	1	—	—	1
Spanish	7	—	4	3
Turkish	2	—	—	2
Italian	1	—	—	1
Lebanese	3	—	—	3
Cypriot	1	—	—	1
Estonian	1	—	—	1
Chinese	3	1*	1	1
Finnish	2	—	—	2
TOTAL;	214	6	44	164

N.B. Syphilis marked with * Syphilis Latent 2.
 Syphilis marked with ** Syphilis Primary 4.

SECTION IX

CASES OF NOTIFIABLE AND OTHER INFECTIOUS DISEASES ON SHIPS

TABLE D

There was 1 case of infectious disease on board ship (Hepatitis).

SECTION X

OBSERVATION ON THE OCCURRENCE OF MALARIA IN SHIPS

No cases of malaria were reported to have occurred on vessels entering the port during the year.

SECTION XI

MEASURES TAKEN AGAINST SHIPS INFECTED WITH OR SUSPECTED FOR PLAGUE

No case, or suspected case of plague was reported to have occurred on vessels arriving at the port during the year. Vessels arriving from plague-infected or suspected areas are visited on arrival, or as soon afterwards as possible, by the Port Medical Officer and Port Health Inspector on rota duty. All vessels arriving from these areas are thoroughly searched for rat evidence by the rodent operative and, where necessary, trapping is carried out and any rats caught or found dead are submitted to the Public Health Laboratory for bacteriological examination.

SECTION XII

MEASURES AGAINST RODENTS IN SHIPS FROM FOREIGN PORTS

Procedure for inspection of ships for rats

NO CHANGE

Arrangements for the bacteriological or pathological examination of rodents, with special reference to rodent plague, including the number of rodents sent for examination during the year.

A proportion of all rats trapped or found dead after fumigation is submitted to the Public Health Laboratory for examination for the detection of plague.

Arrangements in the district for deratting ships and the methods used:

NO CHANGE

Deratting is carried out by private contractors, the undermentioned operate in the district:

Contra-Pest Service Ltd., 2 Ranelagh Road, London, E.6.

The Fumigation Services Ltd., Barking, Essex.

Rentokil Laboratories Limited, Cardiff.

Progress in the rat-proofing of ships:

The incorporation of rat-proofing principles in modern ship construction is having the desired effect of reducing rodent infestation to a minimum.

TABLE E

RODENTS DESTROYED DURING THE YEAR IN SHIPS FROM FOREIGN PORTS

Category					Number
Black Rats	—
Brown Rats	—
Species not known	—
Sent for examination	—
Infected with plague	—

TABLE F

**DERATTING CERTIFICATES AND DERATTING EXEMPTION CERTIFICATES
ISSUED DURING THE YEAR FOR SHIPS FROM FOREIGN PORTS**

Number of Deratting Certificates Issued					Number of Deratting Exemption Certificates issued 6	Total Certificates issued 7
HCN 1	After fumigation with Other fumigant (state method) 2	After Trapping 3	After Poisoning 4	Total 5		
—	—	—	—	—	86	86

The fees received by the Port Health Authority in respect of these certificates amounted to £465.30.

SECTION XIII

INSPECTION OF SHIPS FOR NUISANCES

TABLE G

INSPECTIONS AND NOTICES

Category of Nuisance and number of Inspections		Notices served		Results of Serving Notices
		Statutory Notices	Other Notices	
Defects of Original Constructions	174	—	—	—
Structural Defects through Wear and Tear		—	Verbal 135	Ships on which defects were remedied 58
Dirt, Vermin and Other Con- ditions prejudicial to health		—	39	Ships on which nuisances were remedied 31
TOTAL	174	—	174	89

The number of visits and re-visits made to these vessels in connection with health survey and the remedy of sanitary defects and nuisances totalled 1,685.

Defects and nuisances found on vessels entering the port during the year 1970 are shown below:

Structural Defects through Wear and Tear

Defective:

Water Pipes	3
Boilers	1
Wardrobe Door	1
Fresh Water Tanks	9
Cooking facilities	5

Leaking bulkheads	1
Heating	5
Ventilators	1
Skylights and portlights	16
Floor tiles	10
Wash-hand basins/washing facilities	21
Waste pipes and scuppers	7
Food Lockers	12
Pans W.C.	12
Showers	21
Refrigeration	10

Dirt and Other Conditions Prejudicial to Health:

Dirty:

Crew accommodation	4
Fresh water tanks	3
Scuppers	9
Galley	1
Accumulation of Refuse	1

Verminous:

Cockroach infestation	9
Rat evidence	1
Insect infestation	1
Quay nuisances	10

Total	174
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THE CLEAN AIR ACT

SECTION 20 – APPLICATION TO VESSELS

The Dark Smoke (Permitted Periods) (Vessels) Regulations 1958

Smoke Emissions. – During the year 92 vessels were observed emitting dark smoke and the masters or persons in charge were advised of the above Regulations and appropriate action was taken to reduce the emissions. The number of visits made to these vessels was 155.

SECTION XIV

PUBLIC HEALTH (SHELL FISH) REGULATION 1934 and 1948

NO CHANGE

SECTION XV

MEDICAL EXAMINATION OF ALIENS

(Applicable only to Ports approved for the Landing of Aliens)

List of Medical Inspectors of Aliens holding Warrants of Appointment:

NO CHANGE

List of Other Staff engaged on this work:

NO CHANGE

Organisation of work:

NO CHANGE

Accommodation for Medical Inspection and Examination:

Aliens are able to attend for medical examination at Butetown Health Centre.

Nature and amounts of alien traffic:

Passenger traffic at the port is relatively small and casual. 80 ships arrived during the year with 19 alien passengers on board and none of these were subjected to detailed medical examination.

**COMMONWEALTH IMMIGRANTS ACT 1962
MEDICAL EXAMINATIONS**

During the year the number of arriving Commonwealth citizens subject to control under the Act was Nil.

SECTION XVI

MISCELLANEOUS

NO CHANGE

The Dangerous Drugs Regulations 1953, No. 499, Section 13 (2) (a):

Three certificates were issued authorising the masters of foreign vessels to purchase dangerous drugs.

Certificates of Health:

No certificate in respect of the health of the port were issued to Shipping Companies during the year.

**THE PREVENTION OF DAMAGE BY PESTS (APPLICATION TO SHIPPING)
ORDER 1951**

The Prevention of Damage by Pests (Application to Shipping) Order 1951, made under Section 23 of the Prevention of Damage by Pests Act 1949, applying the provisions of the Act, with appropriate modifications to shipping, has been strictly enforced.

Under the provisions of the above Order, periodical inspection of coastal vessels, etc., is carried out by officers of the department. No Rodent Control Certificates were issued to masters of vessels during the year.

Diseases of Animals Acts, etc.:

43 dogs and 11 cats were brought to the port on vessels. All the vessels were visited regularly during their stay in port to ensure that the requirements were observed.

FOOD INSPECTION

The principal food imports during the year were from Australia and New Zealand and consisted of beef, mutton, lamb, offal, butter and cheese. From Israel and South Africa fruit was imported and from European countries tinned fruit. In addition to these direct imports, quantities of foodstuffs, transhipped at other ports in the British Isles, arrived by coastwise traffic.

Examination of imported food is carried out by the food inspector in the dockside warehouses and occasionally on board ship. If the food examined is found to be in good condition, the whole consignment is released for distribution, but if found to be diseased or unsound, the whole consignment is detained until a complete examination is carried out. Diseased and unsound articles of food are disposed of under the supervision of the food inspectors. When necessary, samples of foodstuffs are submitted for bacteriological examination.

Examination of imported meat is carried out at the dock and local cold stores. The glandular examination of mutton and lamb carcasses over 42 lbs. was continued.

Imported Foodstuffs:

The quantities of various kinds of foodstuffs imported during the year are shown in the following table:

DESCRIPTION	QUANTITY	DESCRIPTION	QUANTITY
Avocados	3,504 ctns.	Oranges	4,159,874 pkgs.
Barley	2,930 tons	Orange juice	4,060 ctns.
Butter	368,128 ctns.		4,400 barrels
Carrots	4,233 bags	Potatoes	74,700 pkgs.
Cheese	92,229 ctns.		24,394 bags
Comminuted Lemons ..	589 barrels		35,888 boxes
Diced lemon skins in brine	40 casks	Buttermilk powder ..	4,400 bags
Dried dates	419 ctns.	Milk Powder	6,392 bags
Grapefruit	1,242,849 pkgs.	Skim milk Powder ..	3,998 bags
Grapefruit juice	262 barrels	Starch (Edible)	16,000 bags
	1,550 ctns.	Tinned New Potatoes ..	625 ctns.
Lemons	61,936 pkgs.	Tinned Apples	1,500 ctns.
Lemon juice	910 barrels	Tinned Tomatoes	79,710 ctns.
Maize	4,070 tons	Tinned Pears	1,000 ctns.
Mandarins	640 pkgs.	Wheat	46,577 tons

Overseas Meat:

7 vessels arrived with the following quantities of overseas meat:

DESCRIPTION	QUANTITY
Chicken Fillets	300 ctns.
Frozen Lamb	172,931 c/cases
Frozen Offal	406 ctns.
Frozen Sundries	5,830 ctns.
	224 pails
Wethers	258 c/cases

The quantities of various kinds of foodstuffs withheld from human consumption during the year are shown below:

Tinned Tomatoes	1st. 2lbs. 6ozs.
Tinned Apples	6lbs.
Potatoes	1,750 bags
Oranges	15,015 pkgs.
Grapefruit	17,096 pkgs.
Lemons	905 pkgs.

The Public Health (Imported Food) Regulations 1968, the Preservatives in Food Regulations 1962 and the Food and Drugs Act 1955:

61 samples of imported food were submitted to the Public Analyst for analysis. The nature country of origin and the number of samples are shown in the following table:

Description	Country of Origin	Number of Samples
Avocados	Israel	1
Grapefruit	Israel	12
Grapefruit	South Africa	5
Grapefruit juice	Israel	2
Lemons	Israel	2
Lemons	South Africa	1
Oranges	Israel	18
Oranges	South Africa	13
Orange juice	Israel	1
Tangerines	Israel	1
Tinned new potatoes ..	Egypt	1
Tinned Tomatoes	Italy	4
		61

Bacteriological Examinations:

No samples of imported food were submitted to the Public Health Laboratory Service for bacteriological examination.

MISCELLANY

Registration of Private Nursing Homes:

At the end of the year 6 homes were registered providing 24 maternity beds and 119 beds for other cases.

METEOROLOGICAL OBSERVATIONS

1970

The geographical position of the Meteorological Station, which is situated at Penylan, Cardiff, is latitude 51° 30' N., longitude 3° 10' W., and the height of the Station above mean sea level is 203 ft.

Observations were made daily at 9.00 a.m. (G.M.T.). Summaries of the observations made during 1970 are given in the following tables:

BAROMETRIC PRESSURE AND RELATIVE HUMIDITY

1970	Attached Ther- mometer (Mean)	Mean Barometric Pressure		Hygrometer		
		Uncorrected	Reduced to Mean Sea Level and Temp. 32°F.	Dry Bulb (Mean)	Wet Bulb (Mean)	Mean Relative Humidity
	°F.	Inches	Inches	°F.	°F.	%
January	41	29.488	29.695	39.5	38.7	93
February	39	29.643	29.859	38.2	36.6	86
March	40	29.756	29.969	38.9	37.3	84
April	44	29.734	29.932	43.2	40.9	79
May	54	29.873	30.040	54.9	51.4	78
June	60	29.883	30.031	61.6	57.5	78
July	59	29.832	29.983	59.4	57.1	86
August	60	29.781	29.927	61.4	58.5	83
September	58	29.813	29.968	57.2	54.9	85
October	53	29.926	30.097	51.6	49.9	86
November	48	29.615	29.801	47.1	45.8	90
December	42	30.014	30.223	40.6	39.5	90
	50	29.780	29.961	49.5	47.3	85

TEMPERATURE

1970	Absolute Maximum °F.	Absolute Minimum °F.	Mean of Maximum °F.	Mean of Minimum °F.	Mean Temperature °F.
January	51	23	45.4	36.1	40.8
February	52	27	45.3	34.1	39.7
March	54	27	46.7	34.7	40.7
April	59	30	53.2	40.1	46.7
May	73	43	64.4	48.0	56.2
June	84	44	70.9	53.7	62.3
July	87	47	71.7	57.6	64.7
August	81	47	68.7	54.5	61.6
September	74	43	66.3	52.8	59.6
October	65	38	57.7	46.6	52.2
November	59	33	51.0	41.3	46.2
December	54	28	42.7	31.6	37.1
	66	35	57.0	44.3	50.6

UNDERGROUND TEMPERATURE AND SUNSHINE

1970	Underground Temperature (Mean)		Bright Sunshine
	1 ft.	4 ft.	Total Duration
January	41.3	44.5	31.9
February	40.7	43.6	106.7
March	40.9	43.0	109.5
April	45.3	44.9	110.9
May	53.0	49.7	173.2
June	59.4	55.1	217.3
July	60.6	57.7	169.9
August	63.8	59.7	142.9
September	60.2	59.0	140.9
October	55.0	57.0	91.4
November	50.0	53.1	41.9
December	44.5	49.0	44.8
	51.1	51.4	1,381.3*

*A daily average of 3.78 hours.

RAINFALL

1970	Total Inches	Difference from Average (80 years) Inches	Greatest fall in 24 hours*		Number of Rain-days (0.01 inch or more)
			Amount Inches	Day	
January	6.13	+2.06	1.04	15th	22
February	5.04	+2.17	0.86	2nd	19
March	2.62	-0.21	0.64	22nd	15
April	3.05	-0.60	0.55	11th	19
May	1.24	-1.36	0.81	8th	8
June	2.43	-0.25	1.21	16th	13
July	3.23	-0.72	0.87	23rd	14
August	3.35	-0.65	1.16	15th	14
September	3.27	-0.32	0.82	7th	12
October	3.17	-1.14	0.55	30th	18
November	9.81	+5.76	1.90	6th	27
December	2.48	-2.02	0.27	29th	17
	45.82	+4.74	1.90 on 6th November		198

*24 hours ended 9.00 a.m. (G.M.T.) next day

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